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AIR FORCE OCCUPATIONAL MEASUREMENT CENTER RANDOLPH AFB TX F/G 5/9
AIRCRAFT CONTROL AND WARNING RADAR CAREER LADDER, AFSCS 30332, --ETC(U)
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OCCUPATIONAL SURVEY REPORT

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AIRCRAFT CONTROL AND WARNING RADAR
CAREER LADDER

AFSCs 30332, 30352, 30372, AND 30393

1274p.
AFPT 90-303-080

11
DECEMBER 1978

OCCUPATIONAL SURVEY BRANCH
USAF OCCUPATIONAL MEASUREMENT CENTER
RANDOLPH AFB TEXAS 78148

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PREFACE

This report presents the results of a detailed Air Force Occupational Survey of the Aircraft Control and Warning Radar Career Ladder (AFSCs 30332, 30352, 30372, 30393). This project was directed by USAF Program Technical Training, Volume 2, dated February 1977. Authority for conducting specialty surveys is contained in AFR 35-2. Computer outputs from which this report was produced are available for use by operating and training officials.

The survey instrument was developed by 1Lt Lisa Ann Pont, Inventory Development Specialist. Mr. Harry G. Lawrence analyzed the survey data and wrote the final report. This report has been reviewed and approved by Lt Col Jimmy L. Mitchell, Chief, Airman Career Ladders Analysis Section, Occupational Survey Branch, USAF Occupational Measurement Center, Randolph AFB, Texas 78148.

Computer Programs for analyzing the occupational data were designed by Dr. Raymond E. Christal, Occupational and Manpower research Division, Air Force Human Resources Laboratory (AFHRL), and were written by the Project Analysis and Programming Branch, Computational Sciences Division, AFHRL.

Copies of this report are available to air staff sections, major commands, and other interested training and management personnel upon request to the USAF Occupational Measurement Center, attention of the Chief, Occupational Survey Branch (OMY), Randolph AFB, Texas 78148.

This report has been reviewed and is approved.

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SUMMARY OF RESULTS

1. Survey Coverage: The Aircraft Control and Warning Radar career ladder job inventory was administered during the period October 1977 through February 1978. Survey results are based on responses from 1,732 of the 2,526 personnel assigned in the 303X2/93 career ladder. This represents 69 percent of all career ladder members.
2. Career Ladder Structure: Two major job clusters were identified, and five smaller independent job type groups were identified within the career ladder. The two major job clusters were the Supervisors and Managers and the Radar Repairmen. The five remaining job type groups were: Quality Controllers, Planners and Schedulers, Radar Evaluators, Job Controllers, and Instructors. In general, the ladder was fairly homogeneous, with the largest differences based on the proportion of management and supervision tasks performed; the proportion of time in maintenance management tasks; and the proportion of radar repair tasks performed by ADCOM or TAC/ PACAF/USAF Repairmen.
3. Career Ladder Progression: Generally, jobs performed by 5-skill level personnel were technical in nature with heavy emphasis on radar repair related tasks either in ADCOM or TAC/PACAF/USAFE. Seven-skill level respondents spent more than one-half of their time in Supervisory and Managerial and in Maintenance Control and Record Keeping. Nine-skill level incumbents were primarily managers with very few technical task requirements.
4. AFMS Differences: First enlistment respondents spent a larger percent of their time in technical tasks maintaining radar systems, and most are assigned as shop repairmen or crew members to search radar, height finder, or combined radar workcenters. Members in subsequent enlistments (particularly in the third and beyond) spent more time on supervisory and managerial and less time on technical tasks. At the fourth enlistment period percentages of members in the quality control workcenter assignments increased. The percentages in position titles of Quality Control Inspector, or NCOIC increases sharply at the fifth position.
5. AFR 39-1 Review: The AFR 39-1 specialty descriptions were generally accurate and reflected the career ladder with certain exceptions; particularly hydraulics, RADOMES, and solid state devices.
6. STS Review: STS 303X2 provided a generally accurate description of the jobs and tasks performed by career ladder respondents.
7. Comparison To Previous Survey: The current survey and the 1974 survey identified notably different job structures. The 1974 study identified 16 clusters and independent job types, the 1978 study identified two major clusters and five smaller independent job types.

OCCUPATIONAL SURVEY REPORT
AIRCRAFT CONTROL AND WARNING RADAR REPAIRMAN CAREER LADDER
(AFSC 303X2)

INTRODUCTION

This is a report of an occupational survey of the Aircraft Control and Warning (AC&W) Radar Repairman career ladder which was completed by the Occupational Survey Branch, USAF Occupational Measurement Center, in September 1978.

The occupational survey program within the Air Force has been in existence since 1956 when initial research was undertaken by the Air Force Human Resources Laboratory to develop the methodology for conducting occupational surveys. By 1967, an operational survey program was established within Air Training Command and surveys were produced annually on 12 enlisted ladders. In 1972, the program was expanded to produce occupational surveys on 51 career ladders annually.

The AC&W Radar Repairman career ladder has had a long history beginning with the development of radar capability to detect and control aircraft from radar sites. Two separate missions are found within the ladder. NORAD and ADCOM operate early warning sites while TAC, PACAF, and USAFE handle the control of aircraft in combat and simulated combat situations. Both missions have unique equipment resources and requirements, with only a moderate degree of overlap. In addition, other activities such as Radar Activities Evaluation squadrons are present in other commands.

A previous occupational survey of this career ladder was published in August 1974. Since the 1974 survey, the career ladder has remained relatively stable, with no major changes in the classification structure. This current project is intended to reexamine the career ladder in terms of tasks and jobs performed by career ladder respondents. Major areas addressed include: (1) development and administration of the job inventory; (2) the job structure found within the AC&W ladder and how this relates to skill level and experience level groups; and (3) comparisons of the job structure with current career ladder documents such as the AFR 39-1 Specialty Descriptions and Specialty Training Standard (STS).

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METHODOLOGY

The data collection instrument for this occupational survey was USAF Job Inventory AFPT 90-303-080. The task list developed for the 1974 study of this career ladder served as the starting point for the new task inventory. The previous task list and background items were expanded and refined through a comprehensive research of publications and directives and through interviews (both in person and by telephone) with training, classification, and assignment personnel, and the functional manager at HQ USAF. Personal interviews were conducted with seven subject-matter specialists (SMS) at an ADCOM site at Roanoke Rapids N. C., and ten members at a TAC site at Bergstrom AFB, Texas.

The tentative inventory was reviewed by 77 subject-matter specialists at 33 operating locations throughout the world, and their comments were used to finalize drafts and develop a final inventory booklet. The final inventory consisted of 457 tasks grouped under 18 duties. In addition to the usual personnel information items such as name, rank, AFSC, degree of supervision, MAJCOM assignment, and job satisfaction, the inventory requested information on equipment usage and Special Experience Identifier information.

Finally, to insure that all possible and required information was included in the inventory, a write-in section was provided for incumbents to list any additional tasks not listed plus any comments that the incumbent might think necessary. An analysis of these write-in comments revealed no clear cut patterns.

SURVEY ADMINISTRATION

During the period October 1977 through February 1978, consolidated base personnel offices in operational units worldwide administered the job inventory to job incumbents holding a DAFSC of 30332, 30352, or 30372. In addition, DAFSC 30393 personnel who were supervising 303X2 incumbents were also surveyed. Members completing the job inventory were required to have held their Duty AFSC at least six weeks and to have been in their present job at least eight weeks.

Each individual who completed the inventory first completed an identification and biographical information section, and then checked each task performed in their current job. After checking all tasks performed, each incumbent then rated each of these tasks on a nine-point scale showing relative time spent on that task as compared to all other tasks checked. These ratings ranged from one (very-small-amount time spent) through five (about-average time spent) to nine (very-large-amount time spent).

In addition to completing the job inventory, selected 7- or 9-skill level incumbents were also asked to complete a second booklet for task difficulty data. This booklet listed only the duty/task list section of the original job inventory. Each incumbent completing this booklet was asked to rate all of the tasks on a nine-point scale from extremely low to extremely high as to the relative difficulty of that task. Difficulty was defined as the length of time it requires an average incumbent to learn to do the task.

SURVEY SAMPLING

Personnel were selected to participate in this survey so as to insure a balanced representation across MAJCOM and DAFSC groups. Table 1 reflects the percentage distribution, by major command, of assigned personnel in the career ladder. Also reflected is the distribution of incumbents in the final survey sample. Table 2 presents the assigned and sampled skill level distribution. Table 3 reflects the percentage distribution of the survey sample by AFMS groups. Tables 1 and 2 indicate that the survey sample distribution was very close to the assigned manning both by major command and by skill level. The difference in 9-skill level incumbents assigned versus those sampled is a result of the restriction that only 9-levels supervising 303X2 personnel complete the inventory. Overall, these sampling distributions tend to verify that the survey sample is adequate and representative of the overall career ladder population.

TABLE 1

COMMAND REPRESENTATION OF THE SURVEY SAMPLE

<u>COMMAND</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
ADC	64%	67%
AFCS	11%	8%
TAC	9%	9%
USAFE	5%	8%
ATC	4%	4%
OTHER	7%	4%
TOTAL ASSIGNED - 2,526		
TOTAL SAMPLED - 1,732		
PERCENT SAMPLED - 69%		

TABLE 2

DAFSC REPRESENTATION OF THE SURVEY SAMPLE

<u>DAFSC</u>	<u>PERCENT OF ASSIGNED</u>	<u>PERCENT OF SAMPLE</u>
30332	11%	12%
30352	50%	49%
30372	33%	32%
30393	*	5%**

* Nine-skill level personnel superintend work in three ladders (303X1, 303X2, 303X3); therefore, specific authorizations are not available for each ladder.

** Reflects only those 9-skill level incumbents who were supervising 303X2 personnel

TABLE 3

SAMPLE DISTRIBUTION BY TIME IN SERVICE

	<u>1-48 MONTHS</u>	<u>49-96 MONTHS</u>	<u>97-144 MONTHS</u>	<u>145-192 MONTHS</u>	<u>193-240 MONTHS</u>	<u>241+ MONTHS</u>
PERCENT OF SAMPLE	36%	18%	9%	14%	14%	9%

CAREER LADDER STRUCTURE

A key aspect of the occupational survey program is to examine the job structure of career ladders on the basis of what people are actually doing in the field. This analysis of actual job structure is made possible by Comprehensive Occupational Data Analysis Programs (CODAP). CODAP generates hierarchical clusterings based on similarities in tasks performed and relative time spent ratings.

The basic identifying group used in the hierarchical job structuring analysis is the Job Type. A job type is a group of individuals who perform many of the same tasks and spend similar amounts of time performing them. When there is a substantial degree of similarity among different job types, they are grouped together and labeled a Cluster. Finally, there are often cases of specialized job types that are too dissimilar to be grouped with other job types into a cluster. These unique groups are labeled Independent Job Types. By identifying the job types and clusters in the survey sample, it is possible to describe the functional structure of the career ladder.

The overall clusters of jobs performed in the 303X2/30393 career ladder can be structurally diagrammed as shown in Figure 1. Figure 2 is a structural diagram of the large Radar Repairmen cluster identified in Figure 1. These clusters or job types are also identified below.

I. SUPERVISORS AND MANAGERS CLUSTER

- A. Communications Electronics Maintenance (CEM) Supervisors
- B. Job Control NCOICs
- C. Radar Maintenance NCOICs
- D. Instructor Supervisors
- E. Radar Workcenter Supervisors
- F. ADCOM Radar Maintenance Supervisors

II. QUALITY CONTROLLERS INDEPENDENT JOB TYPE

III. PLANNERS AND SCHEDULERS INDEPENDENT JOB TYPE

IV. RADAR EVALUATORS INDEPENDENT JOB TYPE

V. JOB CONTROLLERS INDEPENDENT JOB TYPE

FIGURE 1

JOB STRUCTURE OF AC & W RADAR REPAIR CAREER LADDER
AFS 303X2

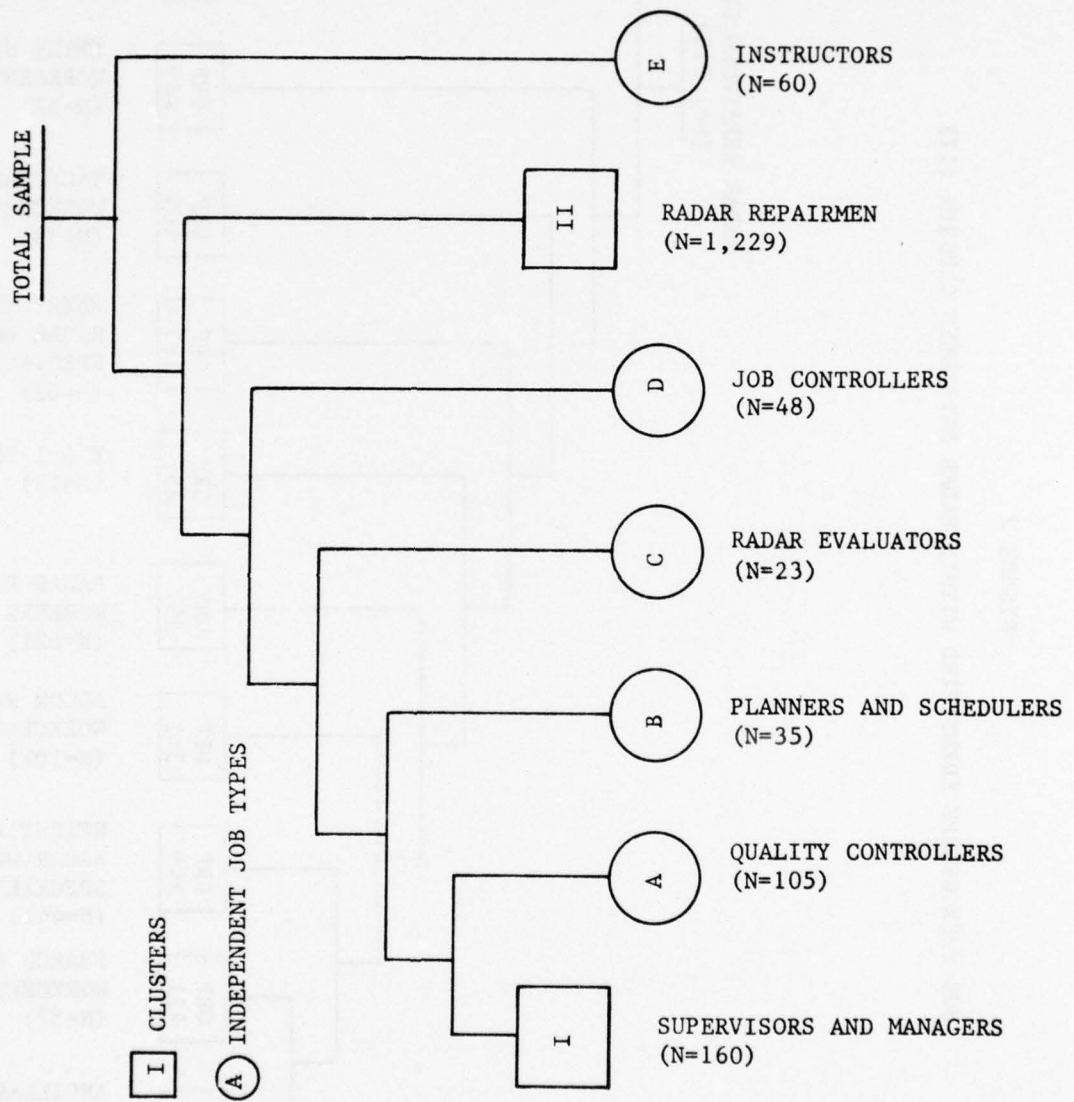
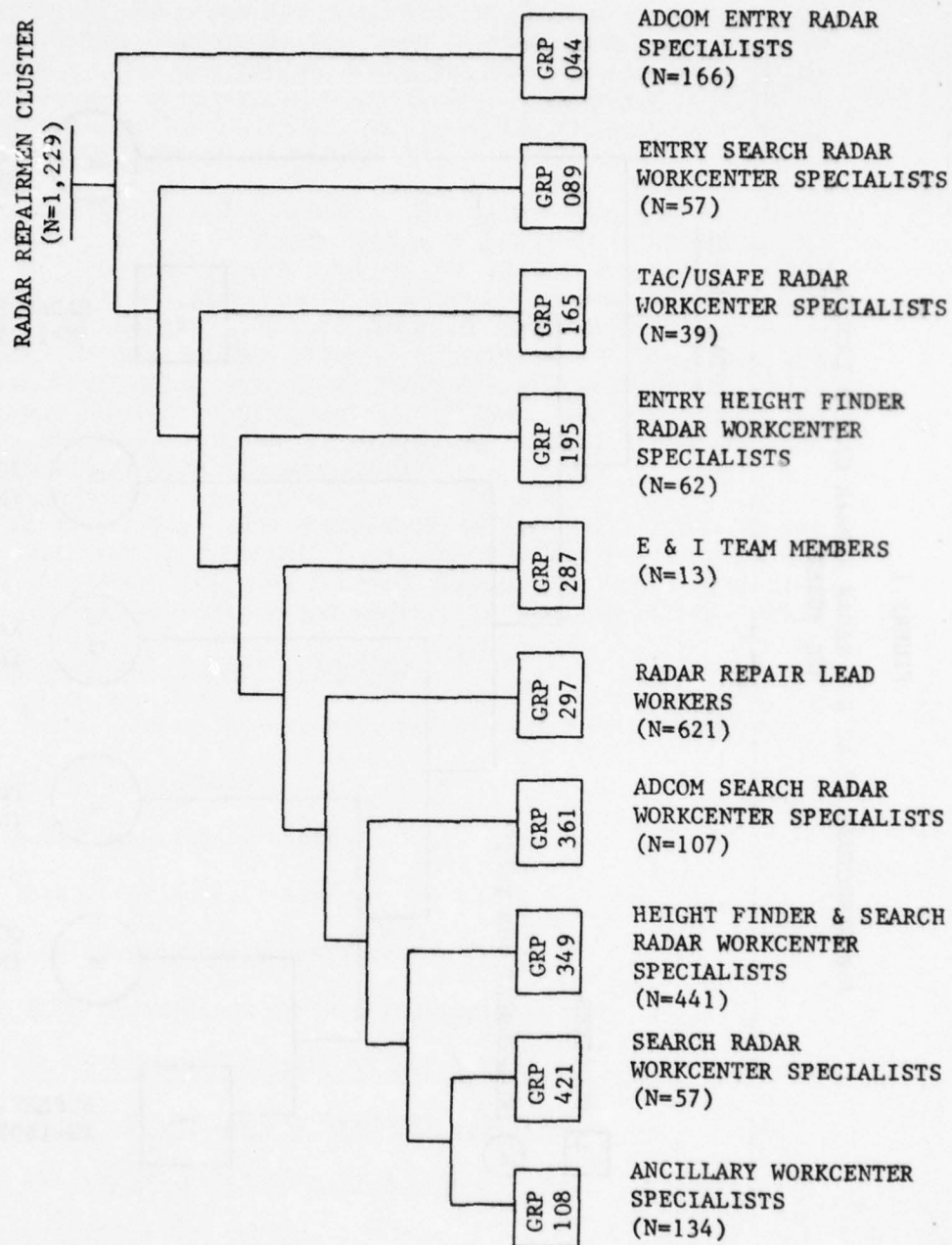


FIGURE 2

JOB TYPE GROUPS IDENTIFIED WITHIN RADAR REPAIRMEN CLUSTER (II)



VI. RADAR REPAIRMEN CLUSTER

- A. Ancillary Workcenter Specialists
- B. Search Radar Workcenter Specialists
- C. Height Finder and Search Radar Workcenter Specialists
- D. ADCOM Search Radar Workcenter Specialists
- E. Radar Repair Lead Workers
- F. E & I Team Members
- G. Entry Height Finder Radar Workcenter Specialists
- H. TAC/USAFE Radar Workcenter Specialists
- I. Entry Search Radar Workcenter Specialists
- J. ADCOM Entry Radar Specialists

VII. INSTRUCTORS INDEPENDENT JOB TYPE

Eighty-eight percent of the survey respondents perform jobs equivalent to those described in the groups listed in Figure 1. The remaining twelve percent included members whose jobs were dissimilar enough that they did not group with any reported grouping. These members included personnel who described themselves as ADCOM staff members, training management personnel, engineering staff members, and AC&W repairmen. As reflected in their titles, they perform jobs ranging from general and preventive maintenance on radar receivers and transmitters to supervisor and staff activities.

Group Descriptions

The following paragraphs contain brief descriptions of the clusters and job types which constitute the AC&W radar repair career ladder. To assist the reader in further understanding the career ladder structure, a series of tables are included. Table 4 reflects the percent time spent on duties for each of the major clusters. Background information is shown in Table 5. In Tables 6 and 7, respectively, the position titles and workcenters of assignment reflect the basic functional areas specified in AFM 66-1 and, as such, provide a means of reflecting the functional structure (based on occupational survey data) to the organizational concepts outlined in AFM 66-1. Table 8 presents job satisfaction data.

I. Supervisors and Managers Cluster (N=160): These senior NCO's spend 78 percent of their job time on tasks associated with supervisory and managerial duties, and an additional 12 percent on administrative tasks. Average paygrade of these incumbents is 6.8, with most averaging 220 months in service.

Within this cluster, six job types were identified. Members in all six groups performed a common core of supervisory tasks. However, they differed around tasks which were specific to each group. Each of these six groups are discussed below and in Appendix A.

A. Communications Electronics Maintenance (CEM) Supervisors (N=82): This group is composed of 82 E-6 and E-7 incumbents. More than 90 percent of the members performed such tasks as supervise AC&W Radar Technicians, draft correspondence, write or indorse APRs, and counsel personnel. All members of the group supervised one or more subordinates. Average time in service was 229 months.

B. Job Control NCOICs (N=5): This small group of senior NCOs identified themselves as job control supervisors. Common tasks included maintaining status boards, supervising job controllers, conducting OJT, and determining training requirements.

C. Radar Maintenance NCOICs (N=7): This group of 7-skill level NCO's all supervised one or more subordinates. The group performed tasks relating to scheduling equipment for repair, observing repairs, supervising AC&W Specialists, and initiating follow up actions on work.

D. Instructor Supervisors (N=11): This group of NCOs are all DAFSC 30372 or DAFSC 30393 respondents. Seven members carried a T prefix and were assigned to ATC. Tasks performed by this group were primarily related to supervisory and training functions and included assigning trainers or instructors, counseling personnel, and maintaining instructor records or training records.

E. Radar Workcenter Supervisors (N=15): Members of this group were all in TAC or USAFE and were all NCOICs or supervisors or radar maintenance. Most of the members were in paygrades E-5 or E-6. Many of the tasks performed by members of this group related to mobility, supervision, and maintaining training and maintenance records. These incumbents are generally second echelon supervisors over several maintenance NCOICs and radar repairmen.

F. ADCOM Radar Maintenance Supervisors (N=10): The members of this group were primarily NCOICs or Training Managers. Tasks performed by many members of this group included supervising AC&W technicians, writing APRs, determining training requirements, and participating in maintenance meetings. These members are generally third echelon supervisors.

II. Quality Controllers (N=105): This group consists primarily of 7-skill level technicians who are generally assigned to the quality control workcenters. The group averages 208 months of active military service. The group members performed tasks relating to preparing inspection reports; conducting maintenance, corrosion control, and facilities inspections; evaluating technical performance of personnel, and drafting correspondence. The job of these incumbents is primarily that of insuring that repair work modifications and general maintenance were to technical order standards.

III. Planners and Schedulers (N=36): This group of 36 personnel works primarily in maintenance or job control workcenters where they plan and schedule maintenance of radar systems. The group performs an average of 21 tasks. Tasks performed by this group pertain to preparing maintenance plans and schedules, maintaining master identification listings, maintaining time compliance technical orders, and maintaining status listings. These incumbents plan and schedule overall radar maintenance and repair activities at a site and forward AFM 66-1 and related data to higher headquarters.

IV. Radar Evaluators (N=23): This independent job type of radar evaluation personnel are all assigned to the 4754th Radar Evaluation Squadron (RADES). This group is primarily composed of radar site, equipment, usage, and capability evaluators. Tasks commonly performed by this group relate to writing reports and evaluations, evaluating radar equipment and sites, and performing operational checks on radar, antenna, and waveguide systems.

V. Job Controllers (N=48): This group of 48 members, primarily in paygrades E-4, E-5, and E-6, are job or maintenance controllers. Seventy-nine percent are assigned to Maintenance Control Workcenters. Forty-nine percent of the group's time is expended on maintenance control and record keeping tasks. Tasks performed by this group include maintaining status or job control boards and records, maintaining training records, initiating follow-up actions, preparing maintenance reports, and documenting maintenance actions.

VI. Radar Repairmen Cluster (N=1,229): This very large cluster of 1,229 radar repairmen are primarily shop repairmen or crewmembers at various workcenters. This group forms the core of the AC&W Radar Repair career ladder. The largest percentage of the group's time is expended in technical duties including general and preventive maintenance, and maintaining radar equipment. Within this very large cluster, ten distinct job types are identified. These job types are reflected in Figure 2, and are briefly described below.

A. Ancillary Workcenter Specialists (N=134): This group of radar repairmen are primarily assigned to ancillary workcenters (58 percent) as crewmembers or shop repairmen. Sixty percent of the group's time is spent performing general and preventive maintenance, and maintaining plan position indicators (PPI), range height indicators (RHI), video mappers, or monitor and maintenance consoles. Equipment

or systems maintained are radar trainers (GPA-98, GSP-T2, and T4), Coder and Decoder Systems (GPA-122), and Ancillary Systems (GPA-30, GPS-127, OA-376ITCU, and 0-15).

B. Search Radar Workcenter Specialists (N=59): These repairmen are primarily assigned to a search radar workcenter as crewmembers or shop repairmen (including assistant NCOIC). Forty-six percent of this group's time is expended in performing general and preventive maintenance, and maintaining radar transmitter systems. Equipment maintained by this group includes radar trainers (GPA-98), radar systems (FPS-26 and 27A), and ancillary equipment (GPA-127).

C. Height Finder and Search Radar Workcenter Specialists (N=441): This large group of incumbents are assigned as shop repairmen or crewmembers at either search radar or height finder radar workcenters. The group is a combination of ADCOM, TAC, and USAFE members. Equipment maintained by this group includes radar systems, and radar identification systems (FPS-43 and TPS-43 series).

D. ADCOM Search Radar Workcenter Specialists (N=107): These incumbents are primarily assigned as shop repairmen or crewmembers at a search radar workcenter (83 percent). Forty-six percent of the group's time is expended in maintaining radar receivers and performing general and preventive maintenance. Equipment maintained by this group includes radar trainers (GPA-98), radar system ancillary equipment, and radar identification systems.

E. Radar Repair Lead Workers (N=62): This group of radar technicians are generally first-echelon supervisors. Fifty-three percent hold the position of Radar Maintenance Assistant NCOIC, NCOIC, or Radar Maintenance Supervisor. The group averages 138 months in the career field. Thirty percent of the group's time is spent in supervisory or managerial tasks while 62 percent is spend on technical tasks. The predominance of the technical work of the group accounts for its grouping in this cluster. Tasks commonly performed are observing work in progress, supervising DAFSC 30352 and 30372 personnel, and recording maintenance data collection information. Equipment maintained includes radar trainers (GPA-98), radar systems (FPS-26 and 26A, FPS-90), ancillary equipment (GPA-127, 0-15), and radar identification systems (UPX-14).

F. E & I Team Members (N=13): This small group of engineer and installation specialists are primarily assigned to AFCS. All identify themselves as E & I Team Members. Fifty-nine percent of the group's time is spent maintaining antennas and waveguide systems; performing general and preventive maintenance; and installing, testing, and operating radar and auxiliary equipment for site mobility. Tasks performed by many members of this group are removing and replacing antenna reflectors, drive motors, waveguide sections, antenna pedestals, and rotary couplers. Equipment used by this group includes radar systems, coder/decoder systems, radar indicators, and radar identification systems.

G. Entry Height Finder Radar Workcenter Specialists (N=62): These incumbents are lower ranking airmen (average paygrade 3.5) averaging 25 months in the career field. Most are assigned to height finder radar workcenters as shop repairmen or crewmembers. The radar equipment used by this group is limited to the FPS-26 and FPS-90 radar systems.

H. TAC/USAFE Radar Workcenter Specialists (N=39): All 39 members of this group are assigned to TAC or USAFE. They average 55 months in the career field. Fifty-one percent are assigned overseas. Most are shop repairmen and crewmembers and are assigned to a combined radar workcenter or a search radar workcenter. Tasks commonly performed by this group are packing radar equipment, rigging vehicles, erecting mobile equipment, operating vehicles, or removing or replacing electronic components.

Radar equipment used or maintained by 20 percent or more of the members of this group include radar systems, coder/decoder systems, radar indicators, and radar identification systems.

I. Entry Search Radar Workcenter Specialists (N=57): The members of this group are lower ranking airmen in their first enlistment. A large percent of the members are assigned to various search radar workcenters (70 percent). A smaller percentage of the group is assigned to height finder workcenters (30 percent). Equipment maintained or used by this group include: ancillary equipment (GPA127) and Radar Indicators (UPX-14).

J. ADCOM Entry Radar Specialists (N=166): Ninety percent of this group in their first enlistment and most are assigned to ADCOM search and height finder workcenters. Sixty-five percent of their time is spent in performing general and preventive maintenance, maintaining radar transmitter systems, and maintaining antenna and waveguide systems.

Radar equipment used by this group include the FPS-27 and 27A radar systems and the GPA-127 and UPX-14 radar indicators.

VII. Instructors Independent Job Type (N=60): This group of 60 airmen are primarily instructors in ATC and are assigned to the Technical Training School at Keesler AFB. Very few of the members are supervisors and tasks performed included conducting classroom training, preparing lesson plans, administering tests, demonstrating equipment, constructing and scoring tests, and serving as student advisors. Two smaller subgroups were identified within this group, a group of classroom instructors and a group performing training equipment maintenance. A smaller percentage of the group was assigned to Height Finder workcenters (30 percent). Equipment maintained or used by this group included: Ancillary Equipment (GPA-127) and Radar Indicators (UPX-14).

The cluster divided into two job types: a classroom instructing job type and a training equipment maintenance job type. These job types are more fully described in Appendix A.

TABLE 4

RELATIVE PERCENT TIME SPENT ON DUTIES BY JOB GROUPS

DUTY	SUPERVISORS AND MANAGERS	QUALITY CONTROLLERS	PLANNERS AND SCHEDULERS	RADAR EVALUATORS	JOB CONTROLLERS	RADAR REPAIRMEN	INSTRUCTORS
<u>SUPERVISORY AND MANAGERIAL</u>							
A ORGANIZING AND PLANNING	21	14	11	13	8	-	-
B DIRECTING AND IMPLEMENTING	30	24	33	12	29	4	4
C EVALUATING AND INSPECTING	15	41	-	13	-	3	4
D TRAINING	12	-	-	7	-	3	79
<u>ADMINISTRATIVE</u>							
E MAINTENANCE CONTROL AND RECORD KEEPING	13	8	41	-	49	4	-
<u>TECHNICAL</u>							
F MAINTAINING RADAR TRANSMITTER SYSTEMS	-	-	-	-	-	10	-
G MAINTAINING ANTENNA AND WAVEGUIDE SYSTEMS	-	-	-	14	-	11	-
H MAINTAINING RADAR RECEIVERS	-	-	-	5	-	13	-
I MAINTAINING PLAN POSITION INDICATORS (PPI), RANGE HEIGHT INDICATORS (RHI), VIDEO MAPPERS, MONITOR OR MAINTENANCE CONSOLES	-	-	-	11	-	14	-
J MAINTAINING ELECTRONIC COUNTERMEASURES CIRCUITS (ECCH) OR ANTIJAM SYSTEMS (AJ)	-	-	-	-	-	-	-
K MAINTAINING SELECTIVE IDENTIFICATION FEATURES (SIF)	-	-	-	4	-	3	-
L MAINTAINING RADOMES	-	-	-	-	-	-	-
M MAINTAINING RADAR TRAINERS	-	-	-	-	-	-	-
N MAINTAINING TRIGGER GENERATION AND DISTRIBUTION SYSTEMS OR SYNCHRONIZERS	-	-	-	-	-	-	-
O MAINTAINING MODE OR STATUS CONTROL SYSTEMS	-	-	-	-	-	-	-
P PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	-	-	-	8	-	23	-
Q INSTALLING, TESTING AND OPERATING RADAR AND AUXILIARY EQUIPMENT FOR SITE OR MOBILITY	-	-	-	-	-	-	-
R MAINTAINING THREE DIMENSIONAL RADAR SYSTEMS	-	-	-	-	-	-	-
- LESS THAN ONE PERCENT	-	-	-	-	-	-	-

TABLE 5

SELECTED BACKGROUND INFORMATION FOR JOB GROUPS

	SUPERVISORS AND MANAGERS	QUALITY CONTROLLERS	PLANNERS AND SCHEDULERS	RADAR EVALUATORS	JOB CONTROLLERS	RADAR REPAIRMEN	INSTRUCTORS
AVERAGE NUMBER OF TASKS PERFORMED	64	42	21	36	12	112	16
AVERAGE PAYGRADE	6.8	6.3	5.3	5.6	4.9	4.1	5.3
DUTY AFSC							
30332	-	-	-	-	-	17%	-
30352	7%	8%	50%	26%	63%	60%	58%
30372	52%	83%	50%	74%	37%	22%	38%
30393	39%	9%	-	-	-	1%	-
NO RESPONSE	2%	-	-	-	-	-	4%
PERCENT OF MEMBERS SUPERVISING	93%	35%	33%	56%	40%	36%	2%
AVERAGE TIME IN 303X2 CAREER LADDER	196 mos	180 mos	137 mos	161 mos	103 mos	64 mos	113 mos
AVERAGE TOTAL ACTIVE MILITARY SERVICE	221 mos	208 mos	150 mos	169 mos	123 mos	74 mos	140 mos
PERCENT MEMBERS IN FIRST ENLISTMENT	-	1%	8%	4%	8%	49%	10%

TABLE 6

POSITION ASSIGNMENT WITHIN JOB GROUPS
(PERCENT MEMBERS RESPONDING)

POSITION	SUPERVISORS AND MANAGERS	QUALITY CONTROLLERS	PLANNERS AND SCHEDULERS	RADAR EVALUATIONS	JOB CONTROLLERS	RADAR REPAIRMEN	INSTRUCTORS
CREW CHIEF	1	-	6	-	19	17	-
QUALITY CONTROL INSPECTOR	2	85	-	-	-	-	-
RADAR MAINTENANCE ASST NCOIC	11	2	3	-	2	6	-
RADAR MAINTENANCE NCOIC	30	-	-	-	-	4	-
RADAR MAINTENANCE SUPERVISOR	12	-	6	9	-	3	-
SHOP REPAIRMAN OR CREW MEMBER	2	-	11	-	15	58	3
TRAINING MANAGER	1	2	-	-	-	1	85
TECHNICAL INSTRUCTOR	2	6	-	-	-	-	5
OTHER	39	5	74	91	64	11	7
TOTAL	100	100	100	100	100	100	100

TABLE 7
WORKCENTER ASSIGNMENTS WITHIN JOB GROUPS
(PERCENT MEMBERS RESPONDING)

WORKCENTER	SUPERVISORS AND MANAGERS	QUALITY CONTROLLERS	PLANNERS AND SCHEDULERS	RADAR EVALUATORS	JOB CONTROLLERS	RADAR REPAIRMEN	INSTRUCTORS
ANCILLARY WORKCENTER	4	1	-	-	-	7	-
COMBINED RADAR WORKCENTER	9	-	6	4	2	13	-
HEIGHT FINDER WORKCENTER	10	-	3	9	-	27	-
MAINTENANCE CONTROL OR JOB CONTROL	7	-	64	-	79	-	-
MOBILITY	1	-	-	-	-	1	-
QUALITY CONTROL	2	89	-	-	-	-	-
SEARCH RADAR WORKCENTER	22	-	6	4	-	39	-
TECHNICAL SCHOOL	6	-	3	-	-	1	85
OTHER	20	3	3	65	4	2	7
NO RESPONSE	19	7	15	18	15	10	8
TOTAL	100	100	100	100	100	100	100

TABLE 8

EXPRESSION OF JOB INTEREST AND PERCEIVED UTILIZATION OF TALENTS AND TRAINING AND
REENLISTMENT INTENTIONS BY FUNCTIONAL AREAS

	SUPERVISORS AND MANAGERS	QUALITY CONTROLLERS	PLANNERS AND SCHEDULERS	RADAR EVALUATORS	JOB CONTROLLERS	RADAR REPAIRMEN	INSTRUCTORS
I FIND MY JOB:							
DULL	8%	9%	19%	-	27%	16%	2%
SO-SO	11%	11%	14%	13%	23%	18%	2%
INTERESTING	75%	78%	61%	87%	46%	63%	93%
NOT REPORTED	6%	2%	6%	-	4%	3%	3%
MY JOB UTILIZES MY TALENTS:							
NOT AT ALL OR VERY LITTLE	14%	10%	39%	4%	44%	23%	5%
FAIRLY WELL TO VERY WELL	62%	69%	53%	78%	50%	69%	67%
EXCELLENTLY TO PERFECTLY	22%	20%	8%	17%	6%	7%	23%
NOT REPORTED	2%	1%	-	1%	-	1%	5%
MY JOB UTILIZES MY TRAINING:							
NOT AT ALL OR VERY LITTLE	15%	17%	69%	4%	60%	18%	7%
FAIRLY WELL TO VERY WELL	59%	69%	28%	70%	37%	70%	62%
EXCELLENTLY TO PERFECTLY	24%	23%	3%	26%	2%	7%	28%
NOT REPORTED	2%	1%	-	-	1%	5%	3%
I PLAN TO REENLIST							
NO	31%	27%	14%	9%	23%	25%	23%
UNCERTAIN, PROBABLY NO	11%	8%	3%	22%	8%	20%	18%
UNCERTAIN, PROBABLY YES	11%	14%	11%	4%	21%	22%	18%
YES	44%	49%	61%	61%	44%	29%	35%
NO REPLY	3%	2%	11%	4%	4%	4%	6%

ANALYSIS OF DAFSC GROUPS

Jobs identified within the CAREER LADDER STRUCTURE section of this report reflect groups of personnel performing similar types of functions. In contrast, the analysis of DAFSC groups reflects the diversity of tasks performed within each skill level. Table 9 presents the relative percent time spent by 5-, 7-, and 9-skill level respondents on each duty listed in the job inventory. As shown, the percent time spent in tasks associated with Supervisory and Managerial duties is higher for 7-skill level respondents than for 5-skill level respondents. However, time spent on administrative tasks (including maintenance management) shows a consistent percent time spend across all skill levels.

DAFSC 30352

Most of the 857 DAFSC 30352 respondents were found to be performing primarily as radar repairmen. This is clearly illustrated by Table 10, which shows the distribution of DAFSC respondents by the major job groups identified in the CAREER LADDER STRUCTURE section. The table shows that 85 percent of 30352 respondents grouped into the Radar Repairmen cluster. In addition, the table shows that some 5-skill level respondents also work as Instructors and Job Controllers.

Although 85 percent of the DAFSC 30352 respondents were classified as radar repairmen, they work on a wide variety of equipment. As a result, few tasks are performed by high percentages of 5-skill level personnel. Table 11 lists the 13 tasks which are performed by more than 60 percent of these respondents. Note that these tasks are mostly general and preventive maintenance tasks (Duty P). Note also that only two of these tasks relate directly to any particular type of equipment (plan position indicators). Most of the tasks performed involve housekeeping and facilities maintenance, removing or replacing electronic components, testing and checking circuits, and fabricating cables.

Most of the 5-skill level members are assigned as specialists at specific workcenters. For example, 22 percent of 5-skill levels are assigned to height-finder radar workcenters, 34 percent are assigned to search-radar workcenters, and ten percent to combined workcenters. Fifty-eight percent identified themselves as shop repairman or crewmembers. Sixty-seven percent are assigned to ADCOM, with nine percent assigned to TAC, and nine percent to USAFE.

DAFSC 30372

The 7-skill level group is more heterogeneous in terms of jobs performed (See Table 10), ranging from supervisory and managerial tasks with administrative and technical jobs. In terms of the functional structure DAFSC 30372s generally grouped into the supervisors and managers cluster, the radar evaluator cluster, and the quality controller Independent Job Type. Many 7-skill levels are also found in the various job types within the radar repairman cluster. Common technical tasks performed pertain to operational checks of equipment; general maintenance; soldering, repairing, removing, and replacing printed circuit boards; adjusting and aligning circuits; and isolating malfunctions. Other representative tasks include drafting correspondence, maintaining training records, conducting maintenance inspections, and observing progress of repairs. Table 12 reflects the ten tasks performed by more than 55 percent of the members of this group. Tasks most differentiating between the 5- and 7-skill level groups are presented in Table 13. The greatest differentiation reflects that 7-skill levels perform more supervisory tasks.

As with the 5-skill levels, members of the 7-skill level group are generally assigned to specific workcenters. Twenty percent are assigned to search-radar workcenters; 16 percent to height-finder radar workcenters; and 16 percent to quality-control workcenters. Tables 14 and 15 reflect the position and workcenter assignments for both the DAFSC 30352 and DAFSC 30372 groups.

DAFSC 30393

Almost all of these 89 members were grouped into the Supervisors and Managers cluster (70 percent), with an additional 11 percent being found in the Quality Controller cluster.

The job of 9-skill level members is primarily managerial and tend to represent second-echelon and third-echelon supervision. Table 9 highlights the managerial and supervisory nature of the 9-skill level job. Members of this group perform an average of 59 tasks. Tasks commonly performed pertained to drafting correspondence, writing reports, supervising AC&W Technicians and other personnel, and evaluating and inspecting personnel, equipment, and training. Table 16 reflects the 11 tasks performed by more than 65 percent of this group.

TABLE 9
PERCENT TIME SPENT ON DUTIES BY DAFSC GROUPS

DUTIES	DAFSC 30352 (N=857)	DAFSC 30372 N=553)	DAFSC 30393 (N=89)
<u>SUPERVISORY AND MANAGERIAL</u>			
A ORGANIZING AND PLANNING	3	10	24
B DIRECTING AND IMPLEMENTING	5	17	31
C EVALUATING AND INSPECTING	3	13	22
D TRAINING	6	10	8
<u>ADMINISTRATIVE</u>			
E MAINTENANCE CONTROL AND RECORD KEEPING	7	9	7
<u>TECHNICAL</u>			
F MAINTAINING RADAR TRANSMITTER SYSTEMS	9	4	1
G MAINTAINING ANTENNA AND WAVEGUIDE SYSTEMS	9	6	1
H MAINTAINING RADAR RECEIVERS	12	6	1
I MAINTAINING PLAN POSITION INDICATORS (PPI), RANGE HEIGHT (RHI), VIDEO MAPPERS, MONITOR OR MAINTENANCE CONSOLES	14	7	1
J MAINTAINING ELECTRONIC COUNTERMEASURES CIRCUITS (ECCM) OR ANTIJAM SYSTEMS (AJ)	1	1	-
K MAINTAINING SELECTIVE IDENTIFICATION FEATURES (SIF)	3	2	-
L MAINTAINING RADOMES	1	1	-
M MAINTAINING RADAR TRAINERS	1	-	-
N MAINTAINING TRIGGER GENERATION AND DISTRIBUTION SYSTEMS OR SYNCHRONIZERS	1	1	-
O MAINTAINING MODE OR STATUS CONTROL SYSTEMS	1	1	-
P PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	21	9	1
Q INSTALLING, TESTING AND OPERATING RADAR AND AUXILIARY EQUIPMENT FOR SITE OR MOBILITY	2	2	3
R MAINTAINING THREE-DIMENSIONAL RADAR SYSTEMS	1	1	-

TABLE 10

PERCENT MEMBERS OF EACH DAFSC GROUP ASSIGNED EACH MAJOR FUNCTIONAL GROUP

GROUP TITLE	DAFSC 30352 (N=857)	DAFSC 30372 (N=553)	DAFSC 30393 (N=89)
SUPERVISORS AND MANAGERS (GRP080)	-	15%	70%
QUALITY CONTROLLERS (GRP148)	-	16%	11%
PLANNERS AND SCHEDULERS (GRP040)	2%	3%	0
RADAR EVALUATORS (GRP038)	1%	3%	0
JOB CONTROLLERS (GRP016)	3%	3%	-
RADAR REPAIRMEN (GRP010)	85%	48%	7%
INSTRUCTORS (GRP013)	-	4%	0
NOT GROUPED	5%	8%	12%

TABLE 11

TASKS PERFORMED BY 60 PERCENT OR MORE OF DAFSC 30352 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING
P37 REMOVE, REPLACE, OR TIGHTEN MISCELLANEOUS HARDWARE SUCH AS SCREWS, BOLTS, OR KNOBS	81
P22 PERFORM GENERAL HOUSEKEEPING PROCEDURES	79
P33 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	74
P21 PERFORM FACILITIES MAINTENANCE, SUCH AS PAINTING, CONSTRUCTION REPAIRING	72
P9 FABRICATE COAXIAL, TRI-AXIAL, SEMI-RIGID, OR MINI CABLES	71
P29 READ OR INTERPRET PLANS, DIAGRAMS, OR SCHEMATICS	70
P19 MAKE SOLDERING OR OTHER REPAIRS TO PRINTED CIRCUIT BOARDS OR JACKS	69
P36 REMOVE OR REPLACE SIMPLE SOLID STATE DEVICES, SUCH AS TRANSISTORS, DIODES, OR SILICON CONTROLLED RECTIFIERS (SCR'S)	69
P40 TEST OR CHECK INTERLOCK CIRCUITS	69
I7 ADJUST OR ALIGN PPI OR RHI SWEEP GENERATING CIRCUITS	64
P34 REMOVE OR REPLACE ELECTRONIC CHASSIS	63
G24 LUBRICATE ANTENNA SYSTEM COMPONENTS	61
E15 PREPARE MAINTENANCE DATA COLLECTION RECORD FORMS (AFTO FORM 349)	60

TABLE 12

TASKS PERFORMED BY 55 PERCENT OR MORE OF DAFSC 30372 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING
A1 CONDUCT OR PARTICIPATE IN MAINTENANCE MEETINGS	71
C26 WRITE OR INDORSE AIRMAN PERFORMANCE REPORTS (APR)	69
D12 MAINTAIN TRAINING RECORDS	68
B7 DRAFT CORRESPONDENCE	63
A6 DETERMINE TRAINING REQUIREMENTS	63
B6 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	63
B13 INITIATE FOLLOW UP ACTIONS ON WORK IN PROGRESS	69
B31 SUPERVISE AC&W RADAR SPECIALIST (AFSC 30352)	58
E12 OBSERVE PROGRESS OF REPAIRS	57
C17 PERFORM CORROSION CONTROL INSPECTIONS	56

TABLE 13

TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 30352 AND 30372 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 30352	DAFSC 30372	DIFFERENCE
P22 PERFORM GENERAL HOUSEKEEPING PROCEDURES	79	46	+33
P37 REMOVE, REPLACE, OR TIGHTEN MISCELLANEOUS HARDWARE SUCH AS SCREWS, BOLTS, OR KNOBS	81	49	+32
B7 DRAFT CORRESPONDENCE	14	63	-49
A6 DETERMINE TRAINING REQUIREMENTS	20	63	-43
C26 WRITE OR INDORSE AIRMAN PERFORMANCE REPORTS (APR)	27	69	-42
A19 PLAN WORK SCHEDULES	14	52	-38
A4 DETERMINE PUBLICATION REQUIREMENTS	17	54	-37
B6 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	26	63	-37
B28 SCHEDULE TEMPORARY DUTY (TDY)	4	40	-36
C15 EVALUATE TECHNICAL PERFORMANCE OF PERSONNEL	12	48	-36
B13 INITIATE FOLLOW UP ACTIONS ON WORK IN PROGRESS	24	59	-35
B31 SUPERVISE AC&W RADAR SPECIALIST (AFSC 30352)	25	58	-33
D12 MAINTAIN TRAINING RECORDS	35	68	-33
A21 WRITE TECHNICAL REPORTS	10	42	-32

TABLE 14

POSITION TITLE BY DAFSC 30352 AND 30372 GROUPS
(PERCENT MEMBERS RESPONDING)

<u>POSITION TITLE</u>	<u>DAFSC 30352</u>	<u>DAFSC 30372</u>
CREW CHIEF	17	11
QUALITY CONTROL INSPECTOR	1	15
RADAR MAINTENANCE ASSISTANT NCOIC	2	13
RADAR MAINTENANCE NCOIC	1	13
RADAR MAINTENANCE SUPERVISOR	2	6
SHOP REPAIRMAN OR CREWMEMBER	58	8
TRAINING MANAGER	1	2
TECHNICAL INSTRUCTOR	4	5
OTHER	14	27
	<u>100</u>	<u>100</u>

TABLE 15

WORKCENTER ASSIGNMENTS BY DAFSC 30352 AND 30372 GROUPS
(PERCENT MEMBERS ASSIGNED)

<u>WORKCENTER</u>	<u>DAFSC 30352</u>	<u>DAFSC 30372</u>
ANCILLARY WORKCENTER	8	4
COMBINED RADAR WORKCENTER	13	10
HEIGHT FINDER WORKCENTER	22	16
MAINTENANCE CONTROL OR JOB CONTROL	4	7
MOBILITY	1	1
QUALITY CONTROL	1	16
SEARCH RADAR WORKCENTER	34	20
TECHNICAL SCHOOL	5	6
OTHER	12	20
	<u>100</u>	<u>100</u>

TABLE 16

TASKS PERFORMED BY 65 PERCENT OR MORE OF DAFSC 30393 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING
B7 DRAFT CORRESPONDENCE	97
A1 CONDUCT OR PARTICIPATE IN MAINTENANCE MEETING	82
C26 WRITE OR INDORSE AIRMAN PERFORMANCE REPORTS (APR)	82
A3 DETERMINE PERSONNEL REQUIREMENTS	78
A4 DETERMINE PUBLICATION REQUIREMENTS	77
A6 DETERMINE TRAINING REQUIREMENTS	76
B6 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS	76
B26 SCHEDULE LEAVES	75
B32 SUPERVISE AC&W RADAR TECHNICIANS (AFSC 30372)	72
A2 DETERMINE EQUIPMENT REQUIREMENTS	70
B15 INITIATE OR DRAFT PERSONNEL ACTION REQUESTS	65

ANALYSIS OF AFMS GROUPS

An analysis was made comparing task and background differences among individuals grouped by months of total active federal military service (TAFMS). Higher TAFMS groups reflect an increase in percent time spent on supervisory and managerial duties. Likewise, percent time spent on technical tasks decreases in the higher TAFMS groups. The pattern of percent time spent on administrative tasks remains fairly constant (8 to 10 percent) after the first enlistment. Table 17 presents the percent time spent on duties by survey respondents grouped by enlistment period.

Table 18 presents the distribution of position titles and workcenter assignments for each enlistment group. During the first three enlistments, career ladder incumbents are most likely to be assigned as a shop repairmen or crewmember at a combined, height finder, or search radar workcenter. During the second and third enlistments, the probability of assignment as a crew chief also increases. In the fourth and subsequent enlistment periods, position assignments and workcenter assignments are more diversified with increasing supervisory, managerial, and quality control assignments.

In their first enlistment period, radar repairmen perform an average of 81 of the 457 tasks in the job inventory. A majority of the 81 tasks pertained to general and preventive maintenance, maintaining radar receivers and transmitters, and maintaining specific types of radar. Radar equipment or systems maintained by 10 percent or more of firstenlistment respondents is reflected in Table 19. For the most part, the percent members maintaining each type of equipment is low. These low percentage figures reflect the range and diversity of radar equipment in this field, and hence the overall heterogeneity previously found in the career ladder.

Repair equipment used on the job by the first enlistment group are presented in Table 20. The percent members using this equipment was fairly high and indicates training on most of these items appears appropriate.

TABLE 17

PERCENT TIME SPENT ON DUTIES BY 303X2 AND 30393 AFMS GROUPS

DUTY	MONTHS TOTAL ACTIVE MILITARY SERVICE					
	1-48 (N=625)	49-96 (N=316)	97-144 (N=145)	145-192 (N=235)	193-240 (N=250)	241+ (N=141)
<u>SUPERVISORY AND MANAGERIAL</u>						
A ORGANIZING AND PLANNING	2	3	6	8	12	20
B DIRECTING AND IMPLEMENTING	2	6	10	14	19	27
C EVALUATING AND INSPECTING	2	4	7	9	16	22
D TRAINING	2	7	8	10	14	10
<u>ADMINISTRATIVE</u>						
E MAINTENANCE CONTROL AND RECORD KEEPING	4	8	9	10	9	9
<u>TECHNICAL</u>						
F MAINTAINING RADAR TRANSMITTER SYSTEMS	11	8	7	5	3	1
G MAINTAINING ANTENNA AND WAVEGUIDE SYSTEMS	11	9	8	6	5	2
H MAINTAINING RADAR RECEIVERS	13	12	9	7	4	2
I MAINTAINING PLAN POSITION INDICATORS (PPI), RANGE HEIGHT INDICATORS (RHI), VIDEO MAPPERS, MONITOR OR MAINTENANCE CONSOLES	15	13	11	8	4	2
J MAINTAINING ELECTRONIC COUNTER MEASURES CIRCUITS (ECCM) OR ANTIJAM SYSTEMS (AJ)	2	2	1	1	1	-
K MAINTAINING SELECTIVE IDENTIFICATION FEATURES (SIF)	2	3	2	2	1	-
L MAINTAINING RADOMES	2	1	1	1	1	-
M MAINTAINING RADAR TRAINERS	1	1	1	1	-	-
N MAINTAINING TRIGGER GENERATION AND DISTRIBUTION SYSTEMS OR SYNCHRONIZERS	1	1	1	1	1	-
O MAINTAINING MODE OR STATUS CONTROL SYSTEMS	1	1	1	1	1	-
P PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	26	18	15	13	6	2
Q INSTALLING, TESTING AND OPERATING RADAR AND AUXILIARY EQUIPMENT FOR SITE OR MOBILITY	2	2	2	2	2	3
R MAINTAINING THREE-DIMENSIONAL RADAR SYSTEMS	1	1	1	1	1	-

TABLE 18

POSITION AND WORKCENTER ASSIGNMENTS BY AFMS GROUPS
(PERCENT MEMBERS PERFORMING)

POSITION TITLE	1-48 (N=625)	49-96 (N=316)	97-144 (N=145)	145-192 (N=235)	193-240 (N=250)	241+ (N=141)
CREW CHIEF	8	24	25	15	6	-
QUALITY CONTROL INSPECTOR	-	1	4	10	18	16
RADAR MAINTENANCE ASST NCOIC	-	3	7	16	11	4
RADAR MAINTENANCE NCOIC	-	2	4	11	15	17
RADAR MAINTENANCE SUPERVISOR	-	3	7	6	6	7
SHOP REPAIRMAN OR CREWMEMBER	81	46	25	12	6	-
TRAINING MANAGER	-	1	2	1	4	1
TECHNICAL INSTRUCTOR	1	5	5	5	6	5
OTHER	10	15	21	24	28	50
WORKCENTER ASSIGNMENT						
ANCILLARY WORKCENTER	6	6	8	6	3	3
COMBINED RADAR WORKCENTER	10	12	14	16	7	4
HEIGHT FINDER WORKCENTER	30	22	16	13	12	5
MAINTENANCE CONTROL OR JOB CONTROL	1	6	8	8	6	5
MOBILITY	1	1	1	1	1	1
QUALITY CONTROL	-	1	4	10	17	18
SEARCH RADAR WORKCENTER	41	34	28	21	20	13
TECHNICAL SCHOOL	2	4	5	6	9	3
OTHER	9	14	16	19	25	48

TABLE 19

RADAR EQUIPMENT OR SYSTEMS MAINTAINED BY 10 PERCENT
OR MORE OF 303X2 PERSONNEL IN FIRST ENLISTMENT

<u>EQUIPMENT OR SYSTEM</u>	<u>PERCENT MEMBERS RESPONDING</u>
RADAR TRAINERS	
GPA-98	25
RADAR SYSTEMS	
FPS-26A	18
FPS-27A	14
FPS-90	11
FPS-107	
ANCILLARY EQUIPMENT	
GPA-127	42
O-15	10
UPA-35	12
RADAR IDENTIFICATION SYSTEMS	
UPX-14	38
UPX-21	16

TABLE 20
ITEMS OF EQUIPMENT USED BY 10 PERCENT OR MORE
303X2 IN FIRST ENLISTMENT

<u>ITEM</u>	<u>PERCENT MEMBERS RESPONDING</u>
MULTIMETERS	96
OSCILLOSCOPES	96
ATTENUATORS	92
SIGNAL GENERATORS	90
TUBE TESTERS	89
PULSE GENERATORS	85
COUPLERS	81
CRIMPING TOOLS	81
SPECTRUM ANALYZERS	72
POWER MONITORS	70
STANDING WAVE RATIO METERS	53
RADAR TEST SETS	52
FREQUENCY COUNTERS	44
TRANSISTOR TESTERS	36
VOLTMETERS	31
CAPACITOR TESTERS	30
PRINTER CIRCUIT CARD TEST SETS	20
PACE KITS	13

ANALYSIS OF TASK DIFFICULTY

From a listing of airmen identified for the 303X2/30393 job survey, incumbents holding 7- and 9-skill levels from various commands and locations were selected to rate task difficulty. Tasks were rated on a nine-point scale from extremely low to extremely high difficulty, with difficulty defined as the length of time it takes an average incumbent to learn to do the task. Interrater reliability (as assessed through components of variance of standardized group means) among the 70 raters was .96. Ratings were adjusted (standardized) so that tasks of average difficulty have ratings of 5.0.

Of the 457 tasks in the inventory, 251 were rated average and above average in difficulty, and 249 tasks were rated below average in difficulty. Table 21 lists the 10 tasks which were rated most difficult. Table 22 lists those ten tasks which were rated least difficult.

Of the 251 tasks rated above average in difficulty, 48 tasks were related to supervisory and managerial duties. As for the more difficult technical tasks, most pertained to isolating malfunctions, removing antennas, and adjusting or aligning units or components.

Of the 208 tasks rated average or below average in difficulty, tasks pertaining to housekeeping, oil sampling, removing and replacing certain electronic components, performing routine functional checks or tests, and routine training and administrative tasks were rated low on the task difficulty scale.

TABLE 21

TASKS RATED MOST DIFFICULT BY 303X2 PERSONNEL

TASKS	DIFFICULTY INDEX	PERCENT MEMBERS PERFORMING
D22 WRITE CDC MATERIALS	7.37	1.7
D23 WRITE SPECIALTY TRAINING STANDARDS (STS)	7.36	2.9
G31 REMOVE OR REPLACE ANTENNA PEDESTALS	7.20	7.0
F13 ISOLATE MALFUNCTIONS ON PULSE COMPRESSION CIRCUITS	6.94	12.1
G32 REMOVE OR REPLACE ANTENNA REFLECTORS	6.92	8.4
H13 ADJUST OR ALIGN PULSE COMPRESSION UNITS	6.81	8.7
C9 EVALUATE RADARS	6.79	15.2
R5 ISOLATE MALFUNCTIONS ON DIGITALIZED BUILT IN TEST EQUIPMENT (BITE) ON 3-D RADAR SYSTEMS	6.74	5.5
H29 ISOLATE MALFUNCTIONS ON PARAMETRIC AMPLIFIERS	6.71	8.9
F9 ISOLATE MALFUNCTIONS ON MODULATOR, MODULATOR PROTECTIVE, OR CONTROL CIRCUITS	6.70	47.1

TABLE 22

TASKS RATED LEAST DIFFICULT BY 303X2 PERSONNEL

TASKS	DIFFICULTY INDEX	PERCENT MEMBERS PERFORMING
P22 PERFORM GENERAL HOUSEKEEPING PROCEDURES	1.8	65.5
P37 REMOVE, REPLACE, OR TIGHTEN MISCELLANEOUS HARDWARE SUCH AS SCREWS, BOLTS, OR KNOBS	2.0	68.0
D18 SCORE TESTS	2.0	9.7
A1 CONDUCT OR PARTICIPATE IN MAINTENANCE MEETINGS	2.1	52.8
P21 PERFORM FACILITIES MAINTENANCE, SUCH AS PAINTING, CONSTRUCTION, REPAIRING	2.2	59.3
P20 OPERATE MILITARY VEHICLES	2.3	37.6
D1 ADMINISTER TESTS	2.5	11.4
A7 DETERMINE TRANSPORTATION REQUIREMENTS	2.5	14.9
B26 SCHEDULE LEAVES	2.5	20.3
P31 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS	2.6	48.6

ANALYSIS OF AFR 39-1 SPECIALTY DESCRIPTIONS

Survey results were compared to the AFR 39-1 Specialty Descriptions, dated 1 Jun 1977, for the 30352 (semiskilled 30332) and for the 30372 AFSC. These descriptions are intended to give a broad overview of the duties and responsibilities required of the various skill level personnel. The 3-, 5- and 7-skill level descriptions were generally accurate. However, some specific items performed by significant proportions of survey respondents were not directly included. Table 23 lists the specific areas involved and related tasks, with the percent members performing at the 5- and 7-skill levels.

TABLE 23

TASKS NOT SPECIFICALLY REFERENCED IN AFR 39-1 SPECIALTY DESCRIPTIONS
(PERCENT MEMBERS PERFORMING)

TASKS	5-SKILL (N=857)	7-SKILL (N=533)
<u>HYDRAULICS</u>		
G16 ISOLATE MALFUNCTIONS ON ANTENNA HYDRAULIC DRIVE AND CONTROL SYSTEMS	16	16
G25 PERFORM OPERATIONAL CHECKS OF ANTENNA HYDRAULIC DRIVE AND CONTROL SYSTEMS	19	16
<u>RADOMES</u>		
L2 ISOLATE MALFUNCTIONS ON RADOME HEATING SYSTEMS	13	13
L3 ISOLATE MALFUNCTIONS ON RADOME PRESSURIZATION SYSTEMS	16	14
L4 OPERATE EMERGENCY PRESSURIZATION EQUIPMENT	17	12
L5 PATCH HOLES IN RADOMES	8	9
L7 PERFORM OPERATIONAL CHECKS OF RADOME HEATING SYSTEMS	14	13
L8 PERFORM OPERATIONAL CHECKS OF RADOME PRESSURIZATION SYSTEMS	18	15
L9 REMOVE OR INSTALL NON-RIGID RADOMES	9	9
L15 REMOVE OR REPLACE RADOME HEATING SYSTEM COMPONENTS	10	10
L16 REMOVE OR REPLACE RADOME PRESSURIZATION SYSTEM COMPONENTS		
<u>SOLID STATE</u>		
P5 ADJUST OR ALIGN SOLID STATE POWER SUPPLIES	46	34
P36 REMOVE OR REPLACE SIMPLE SOLID STATE DEVICES SUCH AS TRANSISTORS, DIODES, OR SILICON CONTROLLED RECTIFIERS (SCR'S)	65	45

COMMAND DIFFERENCES

Since two major missions are involved within the 303X2 career ladder, a comparison of command similarities and differences seemed warranted. With ADCOM and a combination of TAC/PACAF/USAFE making up the major groupings, these commands formed the two major groups used in the analysis. Other commands had too few members for a realistic comparison.

With the exception of general working tools, major differences in specific equipment usage were noted between the comparison groups. Table 24 reflects the equipment used by more than ten percent of both groups, and is an expression of equipment commonality. Note that ancillary equipment is the only type of equipment where there is as many as three items of equipment meeting this criterion.

In terms of equipment differences, individual items are displayed in Table 25. These equipment differences by command are very strong and may warrant examination in terms of possible equipment as an aid in channelization of training.

In terms of tasks performed, they do not differ significantly across commands. The 11 tasks with the greatest commonality are presented in Table 26. These tasks are exclusive to Duty P, Performing General and Preventive Maintenance. An average of 92 tasks were performed by the ADCOM group and 107 tasks by the TAC/PACAF/USAFE group.

Most clearly differentiating tasks are related to site or mobility activities. Coder or decoder, circuitry and aligning PPI (Plan Position Indicators) or RHI (Range Height Indicators) circuitry, anchoring radar equipment, and performing operational tests are also differentiating. These tasks are presented in Table 27. In most of these tasks, the TAC/PACAF/USAFE grouping clearly had a greater percentage of members performing than the ADCOM group.

In summary, equipment usage is very different between the two major groups and less different in terms of tasks performed.

TABLE 24

EQUIPMENT USED BY MORE THAN TEN PERCENT OF BOTH
ADCOM AND TAC/PACAF/USAFE PERSONNEL
(PERCENT MEMBERS RESPONDING)

<u>EQUIPMENT</u>	<u>ADCOM</u> <u>N=1156</u>	<u>TAC/PACAF/USAFE</u> <u>N=316</u>
ANCILLARY EQUIPMENT		
GPA-10	10	18
GPA-127	46	20
UPA-35	11	29
RADAR IDENTIFICATION SYSTEM		
UPX-14	39	15

TABLE 25

EQUIPMENT MAINTENENCE DIFFERENCES BY COMMAND GROUPS

EQUIPMENT	PERCENT MAINTAINING		
	ADCOM N=1156	TAC N=316	DIFF
RADAR TRAINER			
GPA-98	28	9	+19
GPS-T2	5	28	-23
GPS-T4	4	27	-23
RADAR SYSTEMS			
FPS-26A	21	5	+16
FPS-27A	14	4	+10
FPS-107	13	2	+11
FPS-90	12	8	+ 4
FPS-6	11	10	+ 1
TPS-43E	-	33	-33
TPS-44	1	30	-29
TPS-43	1	16	-15
CODER/DECODER SYSTEMS			
GPA-122	8	42	-34
GPA-125	4	40	-36
UPA-59A	-	19	-19
ANCILLARY EQUIPMENT			
GPA-127	46	20	+26
O-15	16	6	+10
GPA-50	12	2	+10
UPA-50	1	31	-30
UPA-35	11	29	-18
UPA-26C	-	22	-22
SN-463T	-	18	-18
GPA-30	10	18	- 8
GPA-13	-	12	-12
RADAR IDENTIFICATION SYSTEMS			
UPX-14	39	15	+14
UPX-21	20	4	+16
UPX-48	1	28	-27
UPX-23	1	32	-31
UPX-6	3	17	-14

TABLE 26

REPRESENTATIVE TECHNICAL TASKS PERFORMED IN COMMON BY BOTH GROUPS

TASK	PERCENT MEMBERS PERFORMING	
	ADCOM N=1156	TAC/PACAF/USAFE N=316
P40 TEST OR CHECK INTERLOCK CIRCUITS	61	55
P37 REMOVE, REPLACE, OR TIGHTEN MISCELLANEOUS HARDWARE SUCH AS SCREWS, BOLTS, OR KNOBS	73	66
I7 ADJUST OR ALIGN PPI OR PHI SWEEP GENERATING CIRCUITS	55	53
P9 FABRICATE COAXIAL, TRI-AXIAL, SEMI-RIGID, OR MINI CABLES	61	54
P22 PERFORM GENERAL HOUSEKEEPING PROCEDURES	71	67
P29 READ OR INTERPRET PLANS, DIAGRAMS, OR SCHEMATICS	63	64
P36 REMOVE OR REPLACE SIMPLE SOLID STATE DEVICES, SUCH AS TRANSISTORS, DIODES, OR SILICON CONTROLLED RECTIFIERS (SCR's)	62	60
P33 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS	55	54

TABLE 27

REPRESENTATIVE TASKS BEST REFLECTING COMMAND DIFFERENCES
(PERCENT MEMBERS PERFORMING)

TASKS	ADCOM (N=1,156)	TAC/PACAF/USAFE (N=316)
I4 ADJUST OR ALIGN PPI OR RHI ANGLE MARK GENERATING CIRCUITS	49	24
I23 ISOLATE MALFUNCTIONS ON PPI OR RHI ANGLE MARK CIRCUITS	50	24
K4 ADJUST OR ALIGN MODE IV EQUIPMENT	6	27
K23 PERFORM OPERATIONAL CHECKS OF SIF SYSTEMS	26	49
R2 BALANCE RECEIVERS IN 3-D RADAR SYSTEMS	2	27
Q25 PERFORM OPERATIONAL TESTS FOR ACCEPTANCE REQUIREMENTS AFTER INSTALLATION	4	34
Q2 ANCHOR RADAR EQUIPMENT	3	45
K8 ADJUST OR ALIGN TRANSISTORIZED SIF CODERS	5	44
K9 ADJUST OR ALIGN TRANSISTORIZED SIF DECODERS	5	46
Q21 INVENTORY SHIPMENTS OF C-E EQUIPMENT	3	58
Q14 ERECT MOBILE ANTENNAS	1	59

COMPARISON OF THE SPECIALTY TRAINING STANDARD (STS) WITH SURVEY RESULTS

A review of the current STS 303X2, dated April 1978, was made for the 3-, 5-, and 7-skill levels. Assistance was provided by subject matter specialists at the technical training school at Keesler AFB, MS who matched inventory tasks with the STS paragraphs and subparagraphs. Each of the STS paragraphs and subparagraphs containing task knowledge or performance requirements were compared to the survey results. However, paragraphs one through five and eight concerning general subjects such as career ladder progression, security, safety, and electronic principles were not evaluated. Likewise, subparagraphs containing only general information or subject knowledge proficiency level requirements were also not evaluated.

Overall, the STS appears to be up to date and complete in meeting general training requirements. All major jobs and tasks identified in this analysis of the career ladder were covered.

COMPARISON OF CURRENT SURVEY FINDINGS TO 1974 STUDY

The results of this survey were compared to those of Occupational Survey Report AFPT 90-303-080, dated 15 August 1974. There are some noted differences in the job structures identified in both reports. As shown in Table 28, the 1974 study identified 16 clusters and independent job types. In contrast, the 1978 study identified six clusters and independent job types.

When grouped for comparison purposes, the strongest difference is in the 1978 study Radar Repairmen cluster. This cluster contained 71 percent of that sample, as compared to 40 percent for matching groups in the 1974 study. This finding indicates an increase in managerial personnel, increased emphasis on AFM 66-1, Maintenance Management and on more preventive maintenance.

Other differences may be noted in the distribution of supervisors and managers. In the 1978 study, the Supervisor and Manager cluster is more clearly defined, with very few technical tasks being performed by cluster members. In the 1974 study, supervisors and managers were scattered throughout many clusters and job types. Many supervisory tasks were performed within cluster groupings in the Radar Repairmen, Quality Controller, Maintenance Controller, and E&I Team functional areas. The apparent reason for this change is an increase in experience levels in the ladder, resulting in better definition of supervisory roles.

Another possible reason for the disparity in report findings is that the Inventory Booklet, the basic tool of structure analysis, has changed from 655 tasks divided into 23 duties in 1974 to 459 tasks in 18 duties in 1978.

TABLE 28

COMPARISON OF JOB STRUCTURES IDENTIFIED IN THE 1978 AND 1974 STUDIES

	1978 STUDY	1974 STUDY
SUPERVISORS AND MANAGERS		
	3%	COMMUNICATIONS ELECTRONICS METEOROLOGICAL MAINTENANCE SUPT 11%
QUALITY CONTROLLERS	6%	QC INSPECTOR/SUPERVISOR 20%
		QUALITY CONTROL INSPECTOR
JOB CONTROLLERS AND PLANNERS AND SCHEDULERS	5%	NCOIC MAINTENANCE CONTROL/MAINTENANCE CONTROL TECHNICIAN 7%
		MAINTENANCE CONTROL TECHNICIAN
INSTRUCTORS	3%	INSTRUCTOR 4%
RADAR EVALUATORS	1%	GROUND RADAR EVALUATION SPECIALIST/ TECHNICIAN/SUPERVISOR 10%
RADAR REPAIRMEN	71%	ELECTRONICS INSTALLATION TEAM CHIEF 48%
		SEARCH RADAR TECHNICIAN
		SEARCH RADAR APPRENTICE/SPECIALIST
		HEIGHT FINDER RADAR TECHNICIAN
		HEIGHT FINDER RADAR APPRENTICE/SPECIALIST
		AC&W RADAR TECHNICIAN

IMPLICATIONS

The Aircraft Control and Warning (AC&W) Radar Repair Job Inventory was administered during the period October 1977 to February 1978. The responses were compared to command strength, skill level and were found to form a representative sample of the career ladder. The Major Commands ADCOM, TAC, USAFE, ATC, and AFSC were represented in adequate number to insure that any implications derived from the data were accurate.

Functional Structure

The functional structure of the career ladder showed that the personnel performed a variety of jobs. One large cluster included those personnel who were principally radar repairmen. This cluster was divided into several job types based on type of Radar, workcenters, commands and levels of experience. Additionally, clusters of Supervisors and Managers, Quality Controllers, Planners and Schedulers, Job Controllers, Radar Evaluators, and Instructors were also identified. The career ladder structure appears to be compatible with the types of jobs described in AFM 66-1 and other official documents pertaining to the career ladder.

Command Differences

A number of job types were found to be relatively command specific (either to ADCOM or a combination of TAC/USAFE/PACAF). This implies assignment and training problems on transfer to or from TAC, PACAF, or USAFE to ADCOM and vice versa. An additional equipment oriented school or OJT emphasis should be considered.

Skill Level

In terms of skill levels, there were clear differences between 5- and 7-skill level incumbents. At the 5-skill level most incumbents were performing primarily technical and maintenance record keeping tasks. Work center assignments were primarily as crew members or shop repairman at Ancillary, Search Radar, Height Finder Radar, or combined radar workcenters.

At the 7-skill level, incumbents reflected much more supervisory task accomplishment. Also Quality Control, Maintenance Control, Job Control, and Crew Chief assignments were more common. In addition, many technical tasks continued to be performed. At the 9-skill level, incumbents were almost entirely managers, with very few technical task requirements.

Equipment Difference by Command

Personnel in ADCOM and in TAC/PACAF/ USAFE maintained differing equipment to a large degree. This has implications for a school before assignment to TAC/PACAF/USAFE. Tasks performed, however, were similar across commands with the exception of mobility tasks performed by those personnel assigned to TAC/PACAF/USAFE. These differences in equipment imply possible problems in performance when personnel transfer from one command to another. Channelizing training within the basic course based upon type of equipment which will be maintained should be considered.

Task Difficulty

Task difficulty estimates were computed for each task in the inventory. Generally tasks relating to isolating malfunctions, writing materials, and removing and replacing certain antenna components or pulse compression units were considered most difficult.

Training

The 3ABR330332 course taught at Keesler AFB was reviewed by block against task and EPI data. The Electronic Principles portion of the course (approximately 6 weeks) is supported by Electronic Principles Inventory Data, and there appears to be little difference between major using commands in the EPI data. No changes are recommended for this portion of the course. For the remainder of the course, the variation in equipment among commands makes common equipment training somewhat difficult. These differences will be discussed in detail in a special addendum to this report for Training.

APPENDIX A

CLUSTER I - GRP080, SUPERVISORS AND MANAGERS

NUMBER IN GROUP: 160

PERCENT OF SAMPLE: 9%

MAJOR COMMAND DISTRIBUTION: ADCOM (50%), TAC (16%), USAF (13%), AFCS (9%),
ATC (6%), AFSC (3%), PACAF (3%)

LOCATION: CONUS (80%), OVERSEAS (20%)

DAFSC DISTRIBUTION: 30352 (7%), 30372 (52%), 30393 (39%), NO RESPONSE (2%)

AVERAGE GRADE: 6.8

AVERAGE TIME IN CAREER FIELD: 196 MOS

AVERAGE TIME IN SERVICE: 221.1 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: LESS THAN ONE PERCENT

AMOUNT OF SUPERVISION: NINETY-FIVE PERCENT SUPERVISE AN AVERAGE OF FIVE
SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 41

GROUP DIFFERENTIATING TASKS:

TASKS

C26 WRITE OR INDORSE AIRMAN PERFORMANCE REPORTS (APR)
A 1 CONDUCT OR PARTICIPATE IN MAINTENANCE MEETINGS
B 6 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS
A 6 DETERMINE TRAINING REQUIREMENTS
B 7 DRAFT CORRESPONDENCE

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

B DIRECTING AND IMPLEMENTING	30
A ORGANIZING AND PLANNING	21
C EVALUATING AND INSPECTING	15
E MAINTENANCE CONTROL AND RECORD KEEPING	12
D TRAINING	12

GROUP ID NUMBER AND TITLE: GRP284, C.E.M. SUPERVISORS

NUMBER IN GROUP: 82

PERCENT OF SAMPLE: 1%

MAJOR COMMAND DISTRIBUTION: ADC (69%), TAC (16%), AFCS (10%), USAF (13%)

LOCATION: CONUS (88%), OVERSEAS (12%)

DAFSC DISTRIBUTION: 30352 (50%), 30372 (46%), NO RESPONSE (2%)

AVERAGE GRADE: 7.0

AVERAGE TIME IN CAREER FIELD: 204.3 MOS

AVERAGE TIME IN SERVICE: 229.9 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 1 PERCENT

AMOUNT OF SUPERVISION: NINETY-FIVE PERCENT SUPERVISE AN AVERAGE OF SIX SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 70.8

GROUP DIFFERENTIATING TASKS:

TASKS

B32 SUPERVISE AC&W RADAR TECHNICIAN (AFSC 30372)
C26 WRITE OR INDORSE AIRMAN PERFORMANCE REPORTS (APR)
A19 PLAN WORK SCHEDULES
E12 OBSERVE PROGRESS OR REPAIRS
B14 INITIATE MAINTENANCE REPORTS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

B DIRECTING AND IMPLEMENTING	31
A ORGANIZING AND PLANNING	23
C EVALUATING AND INSPECTING	17
E MAINTENANCE CONTROL AND RECORD KEEPING	13

GROUP ID NUMBER AND TITLE: GRP356, JOB CONTROL NCOICs

NUMBER IN GROUP: 5 PERCENT OF SAMPLE: LESS THAN ONE PERCENT

MAJOR COMMAND DISTRIBUTION: ADC (80%), TAC (20%)

LOCATION: CONUS (100%)

DAFSC DISTRIBUTION: 30352 (20%), 30372 (60%), 30393 (20%)

AVERAGE GRADE: 6.6

AVERAGE TIME IN CAREER FIELD: 214.2 MOS

AVERAGE TIME IN SERVICE: 224.6 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: NONE

AMOUNT OF SUPERVISION: 100 PERCENT SUPERVISE AN AVERAGE OF THREE SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 31.2

GROUP DIFFERENTIATING TASKS:

TASKS

E10 MAINTAIN STATUS OR JOB CONTROL BOARDS
B29 SUPERVISE AFSCS OTHER THAN 303X2
B13 INITIATE FOLLOW UP ACTIONS ON WORK IN PROGRESS
B26 SCHEDULE LEAVES
A 4 DETERMINE PUBLICATION REQUIREMENTS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

B DIRECTING AND IMPLEMENTING	40
E MAINTENANCE CONTROL AND RECORD KEEPING	21
A ORGANIZING AND PLANNING	19

GROUP ID NUMBER AND TITLE: GRP335, RADAR MAINTENANCE NCOICs

NUMBER IN GROUP: 7

PERCENT OF SAMPLE: LESS THAN ONE PERCENT

MAJOR COMMAND DISTRIBUTION: ADC (86%), AFCS (14%)

LOCATION: CONUS (86%), OVERSEAS (14%)

DAFSC DISTRIBUTION: 30372 (100%)

AVERAGE GRADE: 6.0

AVERAGE TIME IN CAREER FIELD: 170.1 MOS

AVERAGE TIME IN SERVICE: 187.7 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: NONE

AMOUNT OF SUPERVISION: ONE HUNDRED PERCENT SUPERVISE AN AVERAGE OF THREE
SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 71.6

GROUP DIFFERENTIATING TASKS:

TASKS

B28 SCHEDULE TEST EQUIPMENT FOR CALIBRATION OR REPAIRS
E 9 MAINTAIN STATUS LISTINGS OF TEST EQUIPMENT
B31 SUPERVISE AC&W RADAR SPECIALIST (AFSC 30352)
B13 INITIATE FOLLOW UP ACTIONS ON WORK IN PROGRESS
E15 PREPARE MAINTENANCE DATA COLLECTION RECORD FORMS (AFTO FORM 349)

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

B DIRECTING AND IMPLEMENTING	23
E MAINTENANCE CONTROL AND RECORD KEEPING	18
P PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	15
A ORGANIZING AND PLANNING	11

GROUP ID NUMBER AND TITLE: GRP294, INSTRUCTOR SUPERVISORS

NUMBER IN GROUP: 11

PERCENT OF SAMPLE: LESS THAN ONE PERCENT

MAJOR COMMAND DISTRIBUTION: ADC (9%), AFCS (189.), ATC (73%)

LOCATION: CONUS (91%), OVERSEAS (9%)

DAFSC DISTRIBUTION: 30372 (46%), 30393 (46%), NO RESPONSE (8%)

AVERAGE GRADE: 7.0

AVERAGE TIME IN CAREER FIELD: 206.6 MOS

AVERAGE TIME IN SERVICE: 226.7 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: NONE

AMOUNT OF SUPERVISION: ONE HUNDRED PERCENT SUPERVISE AN AVERAGE OF SEVEN
SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 44.1

GROUP DIFFERENTIATING TASKS:

TASKS

C26 WRITE OR INDORSE AIRMAN PERFORMANCE REPORTS (APR)
B 6 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS
D 2 ASSIGN TRAINERS OR INSTRUCTORS
C 5 EVALUATE FORMAL COURSE TRAINING MATERIALS
D11 MAINTAIN INSTRUCTOR RECORDS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

D TRAINING	33
B DIRECTING AND IMPLEMENTING	22
A ORGANIZING AND PLANNING	20

GROUP ID NUMBER AND TITLE: GRP265, RADAR WORKCENTER SUPERVISOR

NUMBER IN GROUP: 15

PERCENT OF SAMPLE: LESS THAN ONE PERCENT

MAJOR COMMAND DISTRIBUTION: TAC (47%), USAFE (53%)

LOCATION: CONUS (40%), OVERSEAS (60%)

DAFSC DISTRIBUTION: 30352 (40%), 30372 (53%), 30393 (7%)

AVERAGE GRADE: 5.4

AVERAGE TIME IN CAREER FIELD: 149.7 MOS

AVERAGE TIME IN SERVICE: 168.5 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: NONE

AMOUNT OF SUPERVISION: NINETY-THREE PERCENT SUPERVISE AN AVERAGE OF THREE
SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 116.5

GROUP DIFFERENTIATING TASKS:

TASKS

Q24 PACK RADAR EQUIPMENT OR RIG VEHICLES FOR DEPLOYMENT OR REDEPLOYMENT
P20 OPERATE MILITARY VEHICLES
Q14 ERECT MOBILE ANTENNAS
E12 OBSERVE PROGRESS OR REPAIRS
B31 SUPERVISE AC&W RADAR SPECIALIST (AFSC 30352)

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

B DIRECTING AND IMPLEMENTING	14
P PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	11
A ORGANIZING AND PLANNING	11
E MAINTENANCE CONTROL AND RECORD KEEPING	11
C EVALUATING AND INSPECTING	9

GROUP ID NUMBER AND TITLE: GRP286, ADCOM RADAR MAINTENANCE SUPERVISORS

NUMBER IN GROUP: 10

PERCENT OF SAMPLE: LESS THAN ONE PERCENT

MAJOR COMMAND DISTRIBUTION: ADC (80%), USAFE (20%)

LOCATION: CONUS (80%), OVERSEAS (20%)

DAFSC DISTRIBUTION: 30372 (90%), 30393 (10%)

AVERAGE GRADE: 6.5

AVERAGE TIME IN CAREER FIELD: 165.7 MOS

AVERAGE TIME IN SERVICE: 216.0 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: NONE

AMOUNT OF SUPERVISION: ONE HUNDRED PERCENT SUPERVISE AN AVERAGE OF THREE
SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 22.6

GROUP DIFFERENTIATING TASKS:

TASKS

- B32 SUPERVISE AC&W RADAR TECHNICIAN (AFSC 30372)
- C26 WRITE OR INDORSE AIRMAN PERFORMANCE REPORTS (APR)
- B 7 DRAFT CORRESPONDENCE
- B 6 COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED PROBLEMS
- B13 INITIATE FOLLOW UP ACTIONS ON WORK IN PROGRESS

TIME SPENT ON DUTIES:

DUTY

- B DIRECTING AND IMPLEMENTING
- D TRAINING
- E MAINTENANCE CONTROL AND RECORD KEEPING

AVERAGE TIME SPENT
BY ALL MEMBERS

38
19
18

INDEPENDENT JOB TYPE A - GRP148, QUALITY CONTROLLERS

NUMBER IN GROUP: 105

PERCENT OF SAMPLE: 6%

MAJOR COMMAND DISTRIBUTION: ADCOM (63%), USAFE (14%), TAC (8%),
AFCS (7%), AAC (4%), OTHER (4%)

LOCATION: CONUS (72%), OVERSEAS (28%)

DAFSC DISTRIBUTION: 30352 (8%), 30372 (83%), 30393 (9%)

AVERAGE GRADE: 6.3

AVERAGE TIME IN CAREER FIELD: 180.0 MOS

AVERAGE TIME IN SERVICE: 207.6 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 1 PERCENT

AMOUNT OF SUPERVISION: 35 PERCENT SUPERVISE AN AVERAGE OF ONE SUBORDINATE

AVERAGE NUMBER OF TASKS PERFORMED: 42

GROUP DIFFERENTIATING TASKS:

TASKS

C22 PREPARE INSPECTION REPORTS
C 1 CONDUCT MAINTENANCE INSPECTIONS
C17 PERFORM CORROSION CONTROL INSPECTIONS
C15 EVALUATE TECHNICAL PERFORMANCE OF PERSONNEL
B21 PREPARE QUALITY CONTROL DISCREPANCY REPORTS OR MATERIEL DEFICIENCY
REPORTS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

C EVALUATING AND INSPECTING	41%
B DIRECTING AND IMPLEMENTING	24%
A ORGANIZING AND PLANNING	14%
E MAINTENANCE CONTROL AND RECORD KEEPING	8%

INDEPENDENT JOB TYPE B - GRP040, PLANNERS AND SCHEDULERS

NUMBER IN GROUP: 36

PERCENT OF SAMPLE: 2%

MAJOR COMMAND DISTRIBUTION: ADCOM (53%), TAC (19%), AFCS (8%), USAF (8%)
AFSC (6%), ATC (3%), PACAF (3%).

LOCATION: CONUS (78%), OVERSEAS (22%)

DAFSC DISTRIBUTION: 30352 (50%), 30372 (50%)

AVERAGE GRADE: 5.3

AVERAGE TIME IN CAREER FIELD: 137.4 MOS

AVERAGE TIME IN SERVICE: 150.4 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 8 PERCENT

AMOUNT OF SUPERVISION: 33 PERCENT SUPERVISE AT LEAST ONE SUBORDINATE

AVERAGE NUMBER OF TASKS PERFORMED: 10

GROUP DIFFERENTIATING TASKS:

TASKS

- E 7 MAINTAIN MASTER IDENTIFICATION LISTINGS
- B18 PREPARE MAINTENANCE PLANS SUCH AS MONTHLY OR QUARTERLY PLANS
- E 9 MAINTAIN STATUS LISTINGS OF TEST EQUIPMENT
- A 1 CONDUCT OR PARTICIPATE IN MAINTENANCE MEETINGS
- B28 SCHEDULE TEST EQUIPMENT FOR CALIBRATION OR REPAIRS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

- E MAINTENANCE CONTROL AND RECORD KEEPING
- B DIRECTING AND IMPLEMENTING
- A ORGANIZING AND PLANNING

41%
33%
10%

INDEPENDENT JOB TYPE C - GRP038, RADAR EVALUATORS

NUMBER IN GROUP: 23

PERCENT OF SAMPLE: 1%

MAJOR COMMAND DISTRIBUTION: ADCOM (100%)

LOCATION: CONUS (100%)

DAFSC DISTRIBUTION: 30352 (26%), 30372 (74%)

AVERAGE GRADE: 5.6

AVERAGE TIME IN CAREER FIELD: 161.0 MOS

AVERAGE TIME IN SERVICE: 168.7 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 4 PERCENT

AMOUNT OF SUPERVISION: 56 PERCENT SUPERVISE AN AVERAGE OF TWO SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 36

GROUP DIFFERENTIATING TASKS:

TASKS

C 9 EVALUATE RADARS

A21 WRITE TECHNICAL REPORTS

G50 TAKE MEASUREMENTS OF ANTENNA CONTOURS

I40 PERFORM OPERATIONAL CHECKS OF PPI, RHI, OR VIDEO MAPPER SYSTEMS

P23 PERFORM INSERTION LOSS TESTS ON CONVERTERS OR CABLES

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

G MAINTAINING ANTENNA AND WAVEGUIDE SYSTEMS

14%

A ORGANIZING AND PLANNING

13%

C EVALUATING AND INSPECTING

13%

B DIRECTING AND IMPLEMENTING

12%

I MAINTAINING PLAN POSITION INDICATORS (PPI), RANGE HEIGHT

11%

INDICATORS (RHI), VIDEO MAPPERS, MONITOR OR MAINTENANCE CONSOLES

INDEPENDENT JOB TYPE D - GRP016, JOB CONTROLLER

NUMBER IN GROUP: 48

PERCENT OF SAMPLE: 3%

MAJOR COMMAND DISTRIBUTION: ADCOM (77%), AFCS (11%), TAC (6%)
AFSC (4%), USAFE (2%)

LOCATION: CONUS (89%), OVERSEAS (11%)

DAFSC DISTRIBUTION: 30352 (63%), 30372 (37%)

AVERAGE GRADE: 4.9

AVERAGE TIME IN CAREER FIELD: 102.6 MOS

AVERAGE TIME IN SERVICE: 123.4 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 8 PERCENT

AMOUNT OF SUPERVISION: 40 PERCENT SUPERVISE AN AVERAGE OF ONE SUBORDINATE

AVERAGE NUMBER OF TASKS PERFORMED: 12

GROUP DIFFERENTIATING TASKS:

TASKS

E10 MAINTAIN STATUS OR JOB CONTROL BOARDS
E 3 DOCUMENT TRAINER UTILIZATION
E 2 DOCUMENT CANNIBALIZATION
E11 MAINTAIN STATUS OR MAINTENANCE REQUIREMENT RECORDS
B13 INITIATE FOLLOW UP ACTIONS ON WORK IN PROGRESS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

E MAINTENANCE CONTROL AND RECORD KEEPING	49%
B DIRECTING AND IMPLEMENTING	29%
A ORGANIZING AND PLANNING	8%

CLUSTER II - GRP010, RADAR REPAIRMEN CLUSTER

NUMBER IN GROUP: 1229

PERCENT OF SAMPLE: 70%

MAJOR COMMAND DISTRIBUTION: ADCOM (73%), TAC (8%), AFCS (8%), USAF (7%)
OTHER (4%)

LOCATION: CONUS (86%), OVERSEAS (14%)

DAFSC DISTRIBUTION: 30332 (17%), 30352(60%), 30372 (22%), 30393 (1%)

AVERAGE GRADE: 4.1

AVERAGE TIME IN CAREER FIELD: 64.3 MOS

AVERAGE TIME IN SERVICE: 74.3 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 49 PERCENT

AMOUNT OF SUPERVISION: 36 PERCENT SUPERVISE AN AVERAGE OF ONE SUBORDINATE

AVERAGE NUMBER OF TASKS PERFORMED: 112

GROUP DIFFERENTIATING TASKS:

TASKS

- P22 PERFORM GENERAL HOUSEKEEPING PROCEDURES
- P37 REMOVE, REPLACE, OR TIGHTEN MISCELLANEOUS HARDWARE SUCH AS SCREWS,
BOLTS, OR KNOBS
- P33 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS SUCH AS TUBES, RESISTORS,
CAPACITORS, OR RELAYS
- P21 PERFORM FACILITIES MAINTENANCE, SUCH AS, PAINTING, CONSTRUCTION REPAIRING
- P23 PERFORM INSERTION LOSS TESTS ON CONVERTERS OR CABLES

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

P PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	23%
I MAINTAINING PLAN POSITION INDICATORS (PPI), RANGE HEIGHT INDICATORS (RHI), VIDEO MAPPERS, MONITOR OR MAINTENANCE CONSOLES	14%
H MAINTAINING RADAR RECEIVERS	13%
C EVALUATING AND INSPECTING	11%

GROUP ID NUMBER AND TITLE: GRP108, ANCILLARY WORKCENTER SPECIALISTS

NUMBER IN GROUP: 134

PERCENT OF SAMPLE: 8%

MAJOR COMMAND DISTRIBUTION: ADCOM (65%), AFCS (13%), AFSC (7%), USAF (7%)
TAC (4%), PACAF (4%)

LOCATION: CONUS (82%), OVERSEAS (18%)

DAFSC DISTRIBUTION: 30332 (8%), 30352 (69%), 30372 (21%), 30393 (1%)
AND RESPONSE (1%)

AVERAGE GRADE: 4.4

AVERAGE TIME IN CAREER FIELD: 74.9 MOS

AVERAGE TIME IN SERVICE: 87.2 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 39 PERCENT

AMOUNT OF SUPERVISION: 35 PERCENT SUPERVISE AN AVERAGE OF ONE SUBORDINATE

AVERAGE NUMBER OF TASKS PERFORMED: 77

GROUP DIFFERENTIATING TASKS:

TASKS

- P33 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS SUCH AS TUBES, RESISTORS, CAPACITORS, OR RELAYS
- P22 PERFORM GENERAL HOUSEKEEPING PROCEDURES
- P37 REMOVE, REPLACE, OR TIGHTEN MISCELLANEOUS HARDWARE SUCH AS SCREWS, BOLTS, OR KNOBS
- P36 REMOVE OR REPLACE SIMPLE SOLID STATE DEVICES, SUCH AS, TRANSISTORS DIODES, OR SILICON CONTROLLED RECTIFIERS (SCR'S)
- P31 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

P PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	35%
I MAINTAINING PLAN POSITION INDICATORS (PPI), RANGE HEIGHT INDICATORS (RHI), VIDEO MAPPERS, MONITOR OR MAINTENANCE CONSOLES	25%
E MAINTENANCE CONTROL AND RECORD KEEPING	7%
B DIRECTING AND IMPLEMENTING	5%

GROUP ID NUMBER AND TITLE: GRP421, SEARCH RADAR WORKCENTER SPECIALISTS

NUMBER IN GROUP: 57

PERCENT OF SAMPLE: 3%

MAJOR COMMAND DISTRIBUTION: ADCOM (98%), OTHER (2%)

LOCATION: CONUS (91%), OVERSEAS (8%)

DAFSC DISTRIBUTION: 30332 (16%), 30352 (61%), 30372 (23%)

AVERAGE GRADE: 4.2

AVERAGE TIME IN CAREER FIELD: 65.6 MOS

AVERAGE TIME IN SERVICE: 79.0 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 47 PERCENT

AMOUNT OF SUPERVISION: 40 PERCENT SUPERVISE AN AVERAGE OF ONE SUBORDINATE

AVERAGE NUMBER OF TASKS PERFORMED: 102

GROUP DIFFERENTIATING TASKS:

TASKS

- P22 PERFORM GENERAL HOUSEKEEPING PROCEDURES
- F18 REMOVE OR REPLACE TRANSMITTER POWER OUTPUT TUBES
- F 4 ADJUST OR ALIGN TRANSMITTER OUTPUT TUBES
- P37 REMOVE, REPLACE, OR TIGHTEN MISCELLANEOUS HARDWARE SUCH AS SCREWS,
BOLTS, OR KNOBS
- F 7 ADJUST OR ALIGN TRANSMITTER RADIO FREQUENCY (RF) AMPLIFIERS OR AMPLIFIER
PROTECTIVE CIRCUITS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

P PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	27%
F MAINTAINING RADAR TRANSMITTER SYSTEMS	20%
G MAINTAINING ANTENNA AND WAVEGUIDE SYSTEMS	13%
I MAINTAINING PLAN POSITION INDICATORS (PPI), RANGE HEIGHT INDICATORS (RHI), VIDEO MAPPERS, MONITOR OR MAINTENANCE CONSOLES	10%

GROUP ID NUMBER AND TITLE: GRP349, HEIGHT FINDER AND SEARCH RADAR WORKCENTER
SPECIALIST

NUMBER IN GROUP: 441

PERCENT OF SAMPLE: 25%

MAJOR COMMAND DISTRIBUTION: ADCOM (68%), TAC (14%), USAF (10%), AFCS (5%)

LOCATION: CONUS (84%), OVERSEAS (16%)

DAFSC DISTRIBUTION: 30332 (6%), 30352 (63%), 30372 (31%)

AVERAGE GRADE: 4.5

AVERAGE TIME IN CAREER FIELD: 80.3 MOS

AVERAGE TIME IN SERVICE: 91.6 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 33 PERCENT

AMOUNT OF SUPERVISION: FIFTY-ONE PERCENT SUPERVISE AN AVERAGE OF ONE SUBORDINATE

AVERAGE NUMBER OF TASKS PERFORMED: 168

GROUP DIFFERENTIATING TASKS:

TASKS

G24 LUBRICATE ANTENNA SYSTEM COMPONENTS
I 7 ADJUST OR ALIGN PPI OR RHI SWEEP GENERATING CIRCUITS
P40 TEST OR CHECK INTERLOCK CIRCUITS
F 1 ADJUST MODULATOR, MODULATOR PROTECTIVE, OR CONTROL CIRCUITS
H32 PERFORM OPERATIONAL CHECKS OF RADAR RECEIVING SYSTEMS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

P	PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	17%
H	MAINTAINING RADAR RECEIVERS	16%
I	MAINTAINING PLAN POSITION INDICATORS (PPI), RANGE HEIGHT INDICATORS (RHI), VIDEO MAPPERS, MONITOR OR MAINTENANCE CONSOLES	15%
G	MAINTAINING ANTENNA AND WAVEGUIDE SYSTEMS	13%

GROUP ID NUMBER AND TITLE: GRP361, ADCOM SEARCH RADAR WORKCENTER SPECIALISTS

NUMBER IN GROUP: 107

PERCENT OF SAMPLE: 6%

MAJOR COMMAND DISTRIBUTION: ADCOM (84%), AFCS (13%), OTHER (3%)

LOCATION: CONUS (90%), OVERSEAS (10%)

DAFSC DISTRIBUTION: 30332 (11%), 30352 (65%), 30372 (21%), NO RESPONSE (3%)

AVERAGE GRADE: 4.1

AVERAGE TIME IN CAREER FIELD: 52.2 MOS

AVERAGE TIME IN SERVICE: 62.9 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 50 PERCENT

AMOUNT OF SUPERVISION: 32 PERCENT SUPERVISE AN AVERAGE OF ONE SUBORDINATE

AVERAGE NUMBER OF TASKS PERFORMED: 105

GROUP DIFFERENTIATING TASKS:

TASKS

H10 ADJUST OR ALIGN MOVING TARGET INDICATOR (MTI) SYSTEMS

H16 ADJUST OR ALIGN VIDEO AMPLIFIERS

H32 PERFORM OPERATIONAL CHECKS OF RADAR RECEIVING SYSTEMS

H 7 ADJUST OR ALIGN INTERMEDIATE FREQUENCY (IF) AMPLIFIERS OR PREAMPLIFIERS

P 9 FABRICATE COAXIAL, TRI-AXIAL, SEMI-RIGID, OR MINI CABLES

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

H MAINTAINING RADAR RECEIVERS

26%

P PERFORMING GENERAL AND PREVENTIVE MAINTENANCE

21%

I MAINTAINING PLAN POSITION INDICATORS (PPI), RANGE HEIGHT
INDICATORS (RHI), VIDEO MAPPERS, MONITOR OR MAINTENANCE
CONSOLES

13%

F MAINTAINING RADAR TRANSMITTER SYSTEMS

10%

GROUP ID NUMBER AND TITLE: GRP297, RADAR REPAIR LEAD WORKERS

NUMBER IN GROUP: 62 PERCENT OF SAMPLE: 4%

MAJOR COMMAND DISTRIBUTION: ADCOM (79%), TAC (7%), AFCS (6%), USAFE (5%)
PACAF (3%)

LOCATION: CONUS (81%), OVERSEAS (19%)

DAFSC DISTRIBUTION: 30332 (10%), 30352 (23%), 30372 (61%), 30393 (6%)

AVERAGE GRADE: 5.4

AVERAGE TIME IN CAREER FIELD: 137.6 MOS

AVERAGE TIME IN SERVICE: 151.4 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 18 PERCENT

AMOUNT OF SUPERVISION: 74 PERCENT SUPERVISE AN AVERAGE OF THREE SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 207

GROUP DIFFERENTIATING TASKS:

TASKS

E12 OBSERVE PROGRESS OR REPAIRS
B13 INITIATE FOLLOW UP ACTIONS ON WORK IN PROGRESS
B 6 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS
B31 SUPERVISE AC&W RADAR SPECIALISTS (AFSC 30352)
A 6 DETERMINE TRAINING REQUIREMENTS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT BY ALL MEMBERS

B DIRECTING AND IMPLEMENTING	13%
P PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	10%
G MAINTAINING ANTENNA AND WAVEGUIDE SYSTEMS	10%
A ORGANIZING AND PLANNING	9%

GROUP ID NUMBER AND TITLE: GPR287, E&I TEAM MEMBERS

NUMBER IN GROUP: 13

PERCENT OF SAMPLE: LESS THAN ONE PERCENT

MAJOR COMMAND DISTRIBUTION: AFCS (69%), AFSC (23%), ADCOM (8%)

LOCATION: CONUS (92%), OVERSEAS (8%)

DAFSC DISTRIBUTION: 30332 (8%), 30352 (54%), 30372 (38%)

AVERAGE GRADE: 4.3

AVERAGE TIME IN CAREER FIELD: 82.2 MOS

AVERAGE TIME IN SERVICE: 90.1 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 31 PERCENT

AMOUNT OF SUPERVISION: 47 PERCENT SUPERVISE AN AVERAGE OF ONE SUBORDINATE

AVERAGE NUMBER OF TASKS PERFORMED: 57

GROUP DIFFERENTIATING TASKS:

TASKS

G32 REMOVE OR REPLACE ANTENNA REFLECTORS
G30 REMOVE OR REPLACE ANTENNA DRIVE MOTORS
G31 REMOVE OR REPLACE ANTENNA PEDESTALS
G39 REMOVE OR REPLACE FIXED WAVEGUIDE SECTIONS
G43 REMOVE OR REPLACE ROTARY COUPLERS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

G	MAINTAINING ANTENNA AND WAVEGUIDE SYSTEMS	30%
P	PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	18%
Q	INSTALLING, TESTING AND OPERATING RADAR AND AUXILIARY EQUIPMENT FOR SITE OR MOBILITY	11%
H	MAINTAINING RADAR RECEIVERS	10%

GROUP ID NUMBER AND TITLE: GRP195, ENTRY HEIGHT FINDER RADAR WORK CENTER SPECIALISTS

NUMBER IN GROUP: 62

PERCENT OF SAMPLE: 4%

MAJOR COMMAND DISTRIBUTION: ADCOM (95%), OTHER (5%)

LOCATION: CONUS (99%), OVERSEAS (3%)

DAFSC DISTRIBUTION: 30332 (24%), 30352 (69%), 30372 (3%), NO RESPONSE (4%)

AVERAGE GRADE: 3.5

AVERAGE TIME IN CAREER FIELD: 28.4 MOS

AVERAGE TIME IN SERVICE: 37.9 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 73 PERCENT

AMOUNT OF SUPERVISION: 18 PERCENT SUPERVISE AN AVERAGE OF ONE SUBORDINATE

AVERAGE NUMBER OF TASKS PERFORMED: 21

GROUP DIFFERENTIATING TASKS:

TASKS

I 7 ADJUST OR ALIGN PPI OR RHI SWEEP GENERATING CIRCUITS
I 5 ADJUST OR ALIGN PPI OR RHI CURSOR CIRCUITS
I 4 ADJUST OR ALIGN PPI OR RHI ANGLE MARK GENERATING CIRCUITS
G13 ADJUST OR ALIGN WAVEGUIDE PRESSURIZING SYSTEMS
I26 ISOLATE MALFUNCTIONS ON PPI OR RHI HEIGHT DISPLAYS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

I	MAINTAINING PLAN POSITION INDICATORS (PPI), RANGE HEIGHT INDICATORS (RHI), VIDEO MAPPERS, MONITOR OR MAINTENANCE CONSOLES	26%
P	PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	21%
G	MAINTAINING ANTENNA AND WAVEGUIDE SYSTEMS	14%
F	MAINTAINING RADAR TRANSMITTER SYSTEMS	11%

GROUP ID NUMBER AND TITLE: GRP165, TAC/USAFE RADAR WORKCENTER SPECIALIST

NUMBER IN GROUP: 39

PERCENT OF SAMPLE: 2%

MAJOR COMMAND DISTRIBUTION: TAC (44%), USAF (44%), AFCS (12%)

LOCATION: CONUS (49%), OVERSEAS (51%)

DAFSC DISTRIBUTION: 30352 (87%), 30372 (10%), NO RESPONSE (3%)

AVERAGE GRADE: 4.0

AVERAGE TIME IN CAREER FIELD: 55.1 MOS

AVERAGE TIME IN SERVICE: 65.1 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 51 PERCENT

AMOUNT OF SUPERVISION: 15% SUPERVISE ONE SUBORDINATE

AVERAGE NUMBER OF TASKS PERFORMED: 30

GROUP DIFFERENTIATING TASKS:

TASKS

Q24 PACK RADAR EQUIPMENT OR RIG VEHICLES FOR DEPLOYMENT OR REDEPLOYMENT
P31 REMOVE OR REPLACE CIRCUIT BOARDS OR CARDS
P19 MAKE SOLDERING OR OTHER REPAIRS TO PRINTED CIRCUIT BOARDS OR JACKS
P29 READ OR INTERPRET PLANS, DIAGRAMS, OR SCHEMATICS
C24 PERFORM INSPECTIONS OF VEHICLES

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

P PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	24%
I MAINTAINING PLAN POSITION INDICATORS (PPI), RANGE HEIGHT INDICATORS (RHI), VIDEO MAPPERS, MONITOR OR MAINTENANCE CONSOLES	12%
G MAINTAINING ANTENNA AND WAVEGUIDE SYSTEMS	10%
H MAINTAINING RADAR RECEIVERS	8%

GROUP ID NUMBER AND TITLE: GRP089, ENTRY SEARCH RADAR WORKCENTER SPECIALIST

NUMBER IN GROUP: 56

PERCENT OF SAMPLE: 3%

MAJOR COMMAND DISTRIBUTION: ADC (89%), TAC (9%), USAFE (4%)

LOCATION: CONUS (92%), OVERSEAS (8%)

DAFSC DISTRIBUTION: 30332 (34%), 30352 (62%), 30372 (4%)

AVERAGE GRADE: 3.3

AVERAGE TIME IN CAREER FIELD: 30.8 MOS

AVERAGE TIME IN SERVICE: 35.2 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 75 PERCENT

AMOUNT OF SUPERVISION: SIX PERCENT SUPERVISE ONE OR MORE SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 56

GROUP DIFFERENTIATING TASKS:

TASKS

P21 PERFORM FACILITIES MAINTENANCE, SUCH AS, PAINTING, CONSTRUCTION REPAIRING
H32 PERFORM OPERATIONAL CHECKS OF RADAR RECEIVING SYSTEMS
P33 REMOVE OR REPLACE DISCRETE ELECTRONIC COMPONENTS SUCH AS TUBES,
RESISTORS, CAPACITORS, OR RELAYS
H10 ADJUST OR ALIGN MOVING TARGET INDICATOR (MTI) SYSTEMS
H11 ADJUST OR ALIGN OR MAKE PERFORMANCE CHECKS OF ANALOG OR NORMAL (LINEAR)
RECEIVER CIRCUITS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

H	MAINTAINING RADAR RECEIVERS	29
P	PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	26
I	MAINTAINING PLAN POSITION INDICATORS (PPI), RANGE HEIGHT INDICATORS (RHI), VIDEO MAPPERS, MONITOR OR MAINTENANCE CONSOLES	12
F	MAINTAINING RADAR TRANSMITTER SYSTEMS	7

GROUP ID NUMBER AND TITLE: GRP044, ADCOM ENTRY RADAR SPECIALISTS

NUMBER IN GROUP: 166

PERCENT OF SAMPLE: 10%

MAJOR COMMAND DISTRIBUTION: ADCOM (90%), AFCS (3%), TAC (29%), USAF (19%)

LOCATION: CONUS (95%), OVERSEAS (5%)

DAFSC DISTRIBUTION: 30332 (52%), 30352 (42%), 30372 (2%), NO RESPONSE (4%)

AVERAGE GRADE: 3.2

AVERAGE TIME IN CAREER FIELD: 22.5 MOS

AVERAGE TIME IN SERVICE: 27.3 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 89 PERCENT

AMOUNT OF SUPERVISION: NINE PERCENT SUPERVISE ONE OR MORE SUBORDINATES

AVERAGE NUMBER OF TASKS PERFORMED: 37

GROUP DIFFERENTIATING TASKS:

TASKS

- P36 REMOVE OR REPLACE SIMPLE SOLID STATE DEVICES, SUCH AS TRANSISTORS, DIODES,
OR SILICON CONTROLLED RECTIFIERS (SCR'S)
- P19 MAKE SOLDERING OR OTHER REPAIRS TO PRINTED CIRCUIT BOARDS OR JACKS
- P29 READ OR INTERPRET PLANS, DIAGRAMS, OR SCHEMATICS
- P 9 FABRICATE COAXIAL, TRI-AXIAL, SEMI-RIGID, OR MINI CABLES

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

P	PERFORMING GENERAL AND PREVENTIVE MAINTENANCE	34%
F	MAINTAINING RADAR TRANSMITTER SYSTEMS	19%
G	MAINTAINING ANTENNA AND WAVEGUIDE SYSTEMS	12%
I	MAINTAINING PLAN POSITION INDICATORS (PPI), RANGE HEIGHT	10%

INDEPENDENT JOB TYPE E - GRP013, INSTRUCTOR

NUMBER IN GROUP: 60

PERCENT OF SAMPLE: 3%

MAJOR COMMAND DISTRIBUTION: ATC (97%), ADCOM (3%)

LOCATION: CONUS (100%)

DAFSC DISTRIBUTION: 30352 (58%), 30372 (38%), NO RESPONSE (47%)

AVERAGE GRADE: 5.3

AVERAGE TIME IN CAREER FIELD: 112.9 MOS

AVERAGE TIME IN SERVICE: 139.9 MOS

PERCENT MEMBERS IN FIRST ENLISTMENT: 10 PERCENT

AMOUNT OF SUPERVISION: ONE RESPONDENT SUPERVISES EIGHT PERSONNEL

AVERAGE NUMBER OF TASKS PERFORMED: 16

GROUP DIFFERENTIATING TASKS:

TASKS

D 4 CONDUCT CLASSROOM TRAINING
D16 PREPARE LESSON PLANS
D 1 ADMINISTER TESTS
D18 SCORE TESTS
D 7 DEMONSTRATE OPERATION OF EQUIPMENT OR TEST INSTRUMENTS

TIME SPENT ON DUTIES:

DUTY

AVERAGE TIME SPENT
BY ALL MEMBERS

D TRAINING	79%
B DIRECTING AND IMPLEMENTING	4%
C EVALUATING AND INSPECTING	4%

